

PRESENTED BY


George Washington University.





LIBRARY
OF THE
UNIVERSITY
OF ILLINOIS

C
G293H
1909/10



Digitized by the Internet Archive
in 2012 with funding from
University of Illinois Urbana-Champaign

78.753

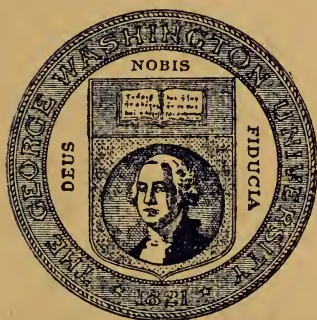
GWU 1

VOLUME VIII

NUMBER 2

The George Washington University Bulletin

CATALOGUE NUMBER



Washington, D. C.
Published by the University
June, 1909

VOL. VIII

No. 2

The
George Washington University
Bulletin

JUNE, 1909

CATALOGUE NUMBER

PUBLISHED BY THE UNIVERSITY AT WASHINGTON, D. C., IN MARCH,
JUNE, OCTOBER, AND DECEMBER

Entered October 6th, 1904, at Washington, D. C., as second-class matter
under Act of Congress of July 16th, 1894

9 2 W

347

PAID TO GLO
YARRELL

C G293 H 1909/10 CONTENTS.

PART I. THE UNIVERSITY:

	PAGE
Calendar	2
University Calendar	3
Board of Trustees	4
The George Washington University Movement.....	4
Of the Colleges	5
Administration and Instruction and President's Council.....	6
The University Council	6
Members of Faculties and Teaching Staff	7
Organization	12
The University Library	13
Annual Commencement and Fall and Winter Convocations.....	14
Privileges in Governmental Institutions open to Students.....	14

PART II. DEPARTMENTS OF THE UNIVERSITY:

Department of Arts and Sciences.

Faculty of Graduate Studies.....	21
Higher Degrees	23
Admission	23
Degrees of Master of Arts and Master of Science.....	23
Higher Degrees in Engineering.....	24
Doctor's Degrees	24
Examinations	25
Degree of Doctor of Jurisprudence.....	26
Degree of Doctor of Philosophy.....	26
Regulations regarding Dissertations.....	27
Doctorate Disputation	27
University Fellowships	28
The Faculty of Undergraduate Studies.....	29
Executive Faculties	30
College of Arts and Sciences.....	32
Admission	32
Examinations for Admission.....	32
Definition of Requirements.....	33
Admission to Advanced Standing.....	41
Admission to Special Courses.....	42
Requirements for Degrees.....	42
Bachelor of Arts Course.....	42
Bachelor of Science in Chemistry.....	45
Combined Courses	46
Required Schedule of Courses for first two years.....	46
Prizes	46
Scholarships	49
Davis Prize Speaking.....	50
Enosinian Society	51
Woman's Building	51
Dean of Women.....	51
Luther Rice Mission Studies.....	52
The Christian Association.....	52
The College Chapel	52
College of Engineering and Mechanic Arts.....	53
Admission	53
Admission to Advanced Standing.....	54
Admission to Special Courses.....	54
Courses for a Degree.....	54
Requirements for a Degree.....	56
Prizes	59
Scholarships	60
College of the Political Sciences.....	62
General Statement	63
Admission	63
Admission to Special Courses.....	63
The Degree of Bachelor of Arts.....	64
Higher Degrees	64
Library	65
Courses of Study.....	65

378.753

WITHDRAWN

GW H1

- 110472

	PAGE
Teachers' College	67
General Statement	67
Organization	67
Admission	68
Admission to Advanced Standing.....	69
The Teacher's Course	69
Graduation	69
The Teacher's Diploma	70
University Scholarships	70
Practice Teaching	70
Experimental Work	70
Teacher's College Library	71
Teacher's Appointment Bureau.....	71
Division of Architecture	72
Admission	72
Requirements for the Degree of Bachelor of Science in Architecture	72
Prizes	74
Courses of Instruction: University Subjects.....	76
Fees	117
Board and Rooms	118
Honorable Dismission	119
<i>Professional Departments</i>	120
Department of Law.....	120
Faculty	120
Court of Appeals.....	120
General Statement	120
Separate Courses for All-Day and Afternoon Students.....	121
Location	122
Academic Year	122
Admission	122
Advanced Standing	124
Hours for Lectures.....	124
Method of Instruction.....	124
Undergraduate Professional Courses.....	125
Courses of Instruction.....	125
Courses in Practice.....	131
Examinations and Grades.....	133
Degrees	135
Law Library and Reading-Room.....	135
Prizes	136
Public Speaking	136
Admission to the Bar of the District of Columbia.....	136
Payment of Fees.....	137
Board and Rooms.....	137
Department of Medicine	138
Faculty	138
Medical Staff, Hospital and Dispensary.....	145
General Statement	147
Admission	149
Admission of Students from Other Schools.....	151
System of Instruction.....	151
Order of Instruction.....	152
Classification of Students.....	152
Optional Five-Year Course.....	152
Courses of Instruction.....	153
Clinical Facilities	163
Examinations	165
Requirements for Degrees.....	166
Scholarships	167
Prizes	167
Hospital Appointments	168
Fees and Contingent Expenses.....	168
Payment of Fees.....	182
Withdrawals	169
Committee on Employment.....	169
Board and Rooms.....	170
Department of Dentistry.....	171
Faculty	171
General Statement	172
Admission	172
Course of Instruction.....	173

CONTENTS.

V

	PAGE
The Dental Infirmary.....	178
Text Books and Works of Reference.....	179
Graduation	180
Prizes	181
Courses in Arts and Sciences.....	181
Location	181
Fees and Contingent Expenses.....	181
Payment of Fees.....	182
Board and Rooms.....	182
National College of Pharmacy.....	183
Faculty	183
General Statement	183
Special Courses	183
The Degree	184
Qualifications for the Degree.....	184
Courses of Instruction.....	184
Fees	187
Schedule	187
College of Veterinary Medicine.....	189
Board of Trustees.....	189
Faculty	189
Announcement	189
PART III. STUDENTS IN THE UNIVERSITY, DEGREES CONFERRED, MISCELLANY:	
<i>Department of Arts and Sciences.</i>	
Faculty of Graduate Studies.....	193
Undergraduate Colleges and Divisions	203
Summary	220
College of the Political Sciences.....	221
<i>Professional Departments.</i>	
Department of Law.....	225
Summary	237
Department of Medicine.....	238
Summary	242
Department of Dentistry.....	242
Summary	243
National College of Pharmacy.....	243
Summary	245
College of Veterinary Medicine.....	245
Geographical Distribution of Students.....	247
Recapitulation	248
Degrees Conferred at Commencement, 1908.....	249
Degrees Conferred at Fall Convocation, 1908.....	256
Degrees Conferred at Winter Convocation, 1909.....	257
Degrees Conferred at Commencement, 1909.....	258
Doctors of Philosophy, 1894-1909.....	266
Associations, Boards, and Committees.....	271
Directory	275
Index	279

PART I.

THE UNIVERSITY.

The George Washington University.

UNIVERSITY CALENDAR.

1909.

June 9, *Wednesday*.—University Commencement.

SUMMER VACATION.

September 29, *Wednesday*.—Academic Year begins in all Departments of the University.

October 20, *Wednesday*.—Fall Convocation.

November 25-27, *Thursday to Saturday*, both inclusive.—Thanksgiving recess.

RECESS FROM DECEMBER 24, 1909, TO JANUARY 1, 1910, BOTH INCLUSIVE, 1910.

January 3, *Monday*.—Last day on which dissertations may be presented.

January 31, *Monday*.—Mid-Year Examinations completed in the Department of Arts and Sciences.

January 31, *Monday*.—Doctorate Disputation.

February 1, *Tuesday*.—Second Term begins.

February 22, *Tuesday*.—Winter Convocation.

February 22, *Tuesday*.—Annual Meeting of the Alumni Association.

March 25-28, *Friday to Monday*, both inclusive.—Easter holidays.

April 12, *Tuesday*.—Davis Prize Speaking.

April 30, *Saturday*.—Last day on which Theses may be presented.

May 23, *Monday*.—Doctorate Disputation.

May 31 - June 3, *Tuesday to Friday*.—Examination for admission.

June 1, *Wednesday*.—Examinations for Degrees completed.

June 5, *Sunday*.—Baccalaureate Sermon.

June 8, *Wednesday*.—University Commencement.

BOARD OF TRUSTEES.

CHARLES WILLIS NEEDHAM, LL.D.,

President of the University and *ex-officio* Member of the Board.

1910.

SAMUEL H. GREENE, D.D., LL.D.

WILLIAM F. MATTINGLY, LL.D.

SAMUEL W. WOODWARD.

EUGENE LEVERING.

EDWARD M. GALLAUDET, LL.D.

HENRY C. YARROW, M.D.

JOHN JOY EDSON, LL.B.

1911.

THOMAS H. ANDERSON.

HENNEN JENNINGS, C.E.

JOHN B. LARNER, LL.D.

HENRY B. F. MACFARLAND.

1912.

THEODORE W. NOYES, LL.M.

CHARLES W. RICHARDSON, M.D.

HENRY C. PERKINS.

CHARLES D. WALCOTT.

LEWIS FLEMER, Phar.D.

ABRAM LISNER.

OFFICERS OF THE BOARD.

H. B. F. MACFARLAND, Chairman.

HARRY C. DAVIS, Secretary.

E. M. GALLAUDET, Vice-Chairman.

CHARLES W. HOLMES, Treasurer.

WILLIAM A. DECAINDRY, Auditor.

STANDING COMMITTEES OF THE BOARD OF TRUSTEES.

1909-1910.

Executive: WOODWARD, GREENE, MATTINGLY, LARNER, GALLAUDET, EDSON,
JENNINGS, PERKINS, NEEDHAM.*Finance:* EDSON, PERKINS, MACFARLAND, LISNER.*Endowment:* PERKINS, WOODWARD, LEVERING.*Scholarships:* GALLAUDET, LEVERING.*Buildings and Grounds:* ANDERSON, MACFARLAND.*Publications:* GALLAUDET, WALCOTT.*Nominations:* LEVERING, NOYES, WOODWARD.*Faculty of Graduate Studies:* WALCOTT, MACFARLAND.*College of Arts and Sciences:* GREENE, NOYES, LARNER.*College of Engineering:* LARNER, EDSON.*Teachers College:* NOYES, PERKINS.*Division of Architecture:* EDSON, NOYES.*Department of Law:* MATTINGLY, LARNER, ANDERSON.*Department of Medicine:* RICHARDSON, YARROW, LARNER.*Department of Dentistry:* YARROW, WOODWARD.*Hospital:* YARROW, RICHARDSON, EDSON.*College of Pharmacy:* HENRY, GREENE, RICHARDSON.**THE GEORGE WASHINGTON UNIVERSITY MOVEMENT.**

RICHARD D. HARLAN, D.D., LL.D., Special Representative.

COLLEGES OF THE UNIVERSITY.
ON INDEPENDENT FOUNDATIONS.

National College of Pharmacy.

President of the University, *ex-officio* Member of the Board.

1908.

C. B. CAMPBELL, M.D., Phar.D.	LEWIS FLEMER, Phar.D.
HERBERT C. EASTERDAY, Phar.D.	WILLARD S. RICHARDSON, Phar.D.

1909.

FRANK C. HENRY, Phar.D.	H. E. KALUSOWSKI, M.D., Phar.D.
G. G. C. SIMMS, Phar.D.	SAMUEL L. HILTON, Phar.D.

1910.

WYMOND H. BRADBURY, Phar.D.	WALTER G. DUCKETT, Phar.D.
SAMUEL WAGGAMAN, M.D.	FRANK P. WELLER, Phar.D.

OFFICERS OF THE BOARD.

H. E. KALUSOWSKI, Chairman.	W. H. BRADBURY, Secretary.
FRANK C. HENRY, Vice-Chairman.	WALTER G. DUCKETT, Treasurer.

College of Veterinary Medicine.

J. A. T. HALL.	DAVID E. BUCKINGHAM, V.M.D.
H. ROZIER DULANEY.	JOHN LOCKWOOD, V.S.
WILLIAM CORCORAN EUSTIS.	JOHN P. TURNER, V.M.D.

Officers.

President's Council.

Dean of the College of Engineering and Mechanic Arts

and Dean of the College of the Political Sciences

Education, and Dean of the Teachers College

Psychology

of Medicine

Experimental Psychology

Pharmacy

Veterinary Medicine

Professors and Assistant Professors in all Departments and Colleges of the University constitute the University Council. Their names appear in the list of Members of Faculties and Teaching Staff.

MEMBERS OF FACULTIES AND TEACHING STAFF.

(Arranged, with the exception of the President, in groups, in the order of appointment.)

CHARLES WILLIS NEEDHAM, LL.D.....PRESIDENT OF THE UNIVERSITY

Professors.

J. FORD THOMPSON, M.D.....Professor of Surgery, Emeritus

ALBERT F. A. KING, A.M., M.D., LL.D.....Professor of Obstetrics,
and Dean Emeritus of the Faculty of Medicine

THEODORE NICHOLAS GILL, M.D., Ph.D., LL.D....Professor of Zoölogy

JAMES HOWARD GORE, Ph.D.....Professor of Mathematics, Emeritus

GEORGE N. ACKER, A.M., M.D.....Professor of Pediatrics and
of Clinical Medicine

HOWARD LINCOLN HODGKINS, Ph.D.....Professor of Mathematics,
and Dean

HENRY CRÈCY YARROW, M.D.....Professor of Dermatology

D. KERFOOT SHUTE, A.B., M.D.....Professor of Anatomy and
of Ophthalmology

HENRY CLAY THOMPSON, D.D.S.....Professor of Operative Dentistry

JOHN MARSHALL HARLAN, LL.D.....Professor of Law

HERMANN SCHOENFELD, Ph.D., LL.D.....Professor of German

STERLING RUFFIN, M.D.....Professor of Medicine

JOHN VAN RENSSELAER, A.B., M.D.....Clinical Professor of Surgery

JAMES MACBRIDE STERRETT, A.M., D.D.....Professor of Philosophy,
Emeritus

CHARLES EDWARD MUNROE, Ph.D....Professor of Chemistry, and Dean

GEORGE P. MERRILL, Ph.D.....Professor of Geology and Mineralogy

CHARLES W. RICHARDSON, M.D..Professor of Laryngology, Rhinology
and Otology

FRANK WIGGLESWORTH CLARKE, Sc.D..Professor of Mineral Chemistry

HARVEY WASHINGTON WILEY, Ph.D., M.D...Professor of Agricultural
Chemistry

FRANK HAGAR BIGELOW, A.M., L.H.D.....Professor of Astro-Physics

MELVILLE CHURCH, LL.M.....Professor of the Law of Patents

WILLIAM ALLEN WILBUR, A.M.....Professor of English, and Dean

J. WESLEY BOVEE, M.D.....Professor of Gynecology

THOMAS A. CLAYTOR, M.D.....Professor of Materia Medica and
Therapeutics and Clinical Professor of Medicine

A. R. SHANDS, M.D.....Professor of Orthopedic Surgery

CHARLES CLINTON SWISHER, Ph.D., LL.D.....Professor of History

RANDOLPH B. CARMICHAEL, M.D....Clinical Professor of Dermatology

FRANCIS R. HAGNER, M.D.....Professor of Genito-Urinary Surgery
and Venereal Diseases

WALTER C. CLEPHANE, LL.M.....Professor of Law

†DAVID JAYNE HILL, LL.D.....	Professor of European Diplomacy
MITCHELL CARROLL, Ph.D.....	Professor of Classical Languages and Archaeology
PAUL BARTSCH, Ph.D.....	Professor of Zoölogy
W. C. WOODWARD, M.D., LL.M....	Professor of Medical Jurisprudence
†H. P. BLAIR, LL.M.....	Professor of Law
ALBERT L. STAVELY, M.D.....	Clinical Professor of Gynecology
STANTON L. PEELE, LL.D.....	Professor of Law
GEORGE N. HENNING, A.M.....	Professor of Romance Languages
PERCY ASH, C.E.....	Professor of Architecture, and Dean
JOHN PAUL EARNEST, A.M., LL.M.....	Professor of Law
WILLIAM REYNOLDS VANCE, Ph.D., LL.B.....	Dean of the Faculty of Law and Professor of Law
J. ROLAND WALTON, D.D.S.....	Professor of Prosthetic Dentistry and Orthodontia, and Dean
WILLIAM A. WHITE, M.D..	Professor of Mental and Nervous Diseases
ERNEST G. LORENZEN, Ph.B., LL.B., J.U.D.....	Professor of Law
GEORGE LANSING RAYMOND, L.H.D.....	Professor of Æsthetics
ALBERT BURNLEY BIBB.....	Professor of Architecture
WILLISTON S. HOUGH, Ph.M..	Professor of Psychology and Education, and Dean
HENRY L. ABBOT, LL.D., Brig.-Gen., U.S.A.,	Professor of Hydraulic Engineering
GEORGE M. STERNBERG, Surgeon-General, U.S.A.,	Professor of Preventive Medicine
JAMES BROWN SCOTT, M.A., J.U.D.....	Professor of Law
EDWARD BENNETT ROSA, Ph.D.....	Professor of Physics
ASAPH HALL, Ph.D.....	Professor of Astronomy
ARTHUR A. SNYDER, M.D.....	Clinical Professor of Surgery
I. W. BLACKBURN, M.D.....	Professor of Morbid Anatomy
ALBERT MANN, A.M., Ph.D.....	Professor of Botany
SAMUEL WAGGAMAN, M.D., Phar.D.....	Professor of Materia Medica, Botany and Toxicology
WILLIAM F. HILLEBRAND, Ph.D., Phar.D.....	Professor of Chemistry and Physics
FREDERICK A. HOLTON, B.S., Phar.D..	Professor of Analytical Chemistry
HENRY E. KALUSOWSKI, M.D., Phar.D..	Professor of Pharmacy, and Dean
BURTON J. HOWARD, B.S.....	Professor of Microscopy
EDWARD S. THURSTON, A.M., LL.B.....	Professor of Law
WILLIAM C. DENNIS, A.M., LL.B.....	Professor of Law

† Absent on leave.

HARRIETT STRATTON ELLIS, A.B.....	Dean of Women
SHEPHERD IVORY FRANZ, Ph.D.....	Professor of Physiology and Experimental Psychology
HENRY PARKER WILLIS, Ph.D.....	Professor of Finance
J. R. DEFARGES, M.D.....	Professor of Oral Surgery
JOSEPH JAMES KINYOUN, Ph.D., M.D.....	Professor of Pathology and Bacteriology
CHARLES SIDNEY SMITH, Ph.D.....	Professor of Greek and Latin
WENDELL P. STAFFORD, LL.D.....	Professor of Law
JOSIAH A. VAN ORSDEL, LL.D.....	Professor of Law
ALEXANDER MUNCASTER, Phar.D., LL.B., LL.M.....	Professor of Pharmaceutical Jurisprudence
HENRY B. FLOYD, Phar.D.....	Professor of Mercantile Pharmacy
WILLIAM CLINE BORDEN, M.D., U.S.A. (retired)...	Professor of Surgery
JOHN R. WELLINGTON, M.D.....	Clinical Professor of Surgery
HURON W. LAWSON, M.D.....	Professor of Histology and Embryology and Associate in Surgery
D. WEBSTER PRENTISS, M.D.....	Professor of Hygiene
DAVID E. BUCKINGHAM, V.M.D.....	Professor of Materia Medica, Therapeutics, and Canine Practice, and Dean
JOHN LOCKWOOD, D.V.S.....	Professor of Veterinary Surgery
JOHN P. TURNER, V.M.D.....	Professor of Theory and Practice of Veterinary Medicine
ROBERT J. FORMAD, V.M.D., M.D...	Professor of Comparative Histology and Pathology
ADOLPH EICHORN, D.V.S.....	Professor of Meat Hygiene
ALBERT H. HASSAL, M.R.C.V.S.....	Professor of Veterinary Zoology
GEORGE H. HART, V.M.D., M.D.....	Professor of Sanitary Science and National Quarantine
BENJAMIN T. WOODWARD, V.M.D.....	Professor of Milk Hygiene and Dairy Inspection
ADRIAN V. HALL, V.M.D.....	Professor of Veterinary Anatomy
J. C. MONNET, M.A., LL.B.....	Professor of Law

Associate Professors.

WILLIAM K. BUTLER, A.M., M.D.....	Associate Professor of Ophthalmology
J. R. DEFARGES, M.D...	Associate Professor of Metallurgy, Professional Ethics, Dental Jurisprudence, and Economics
W. O. OWEN, M.D.....	Associate Professor of Anatomy
CHARLES T. BASSETT, D.D.S.....	Associate Professor in Charge of Dental Infirmary
ALLEN S. WOLFE, D.D.S....	Associate Professor of Crown and Bridge Work and Porcelain

CADMUS LINDEN ODOR, D.D.S.....Associate Professor of Operative
Technics and Comparative Anatomy

W. FRANCIS LAWRENCE, D.D.S....Associate Professor of Prosthetic
Technics

Assistant Professors.

EDWARD G. SEIBERT, M.D.....Assistant Professor in Chemistry and
Instructor in Ophthalmology

NEVIL MONROE HOPKINS, Ph.D.....Assistant Professor of Chemistry

PHILANDER BETTS, E.E..Assistant Professor of Electrical Engineering

EDWIN A. HILL, Ph.D.....Assistant Professor of Chemistry

THOMAS MALCOLM PRICE, Ph.D.....Assistant Professor of Chemistry

RAY SMITH BASSLER, Ph.D.....Assistant Professor of Geology

TIMOTHY W. STANTON, Ph.D.....Assistant Professor of Paleontology

PAUL N. PECK, A.M.....Assistant Professor of Mathematics

DEWITT C. CROISSANT, A.B.....Assistant Professor of English

ALFRED F. W. SCHMIDT, A.M.....Assistant Professor of German, and
Librarian

JONATHAN R. HAGAN, D.D.S....Assistant Professor of Dental Materia
Medica and Therapeutics

WILLIAM RAY MANNING, Ph.D.....Assistant Professor of History

WILLIAM CARL RUEDIGER, Ph.D....Assistant Professor of Educational
Psychology

LOUIS COHEN, B.S.....Assistant Professor of Mathematics

PERLEY G. NUTTING, Ph.D.....Assistant Professor of Physics

EDWIN V. DUNSTAN, C.E....Assistant Professor of Civil Engineering

OSCAR A. MECHLIN, C.E....Assistant Professor of Civil Engineering

ARTHUR CUTTS WILLARD, B.S.....Assistant Professor of Mechanical
Engineering

CHARLES MASON REMEY.....Assistant Professor of Architecture

JAMES FREDERICK PEAKE, A.M.....Assistant Professor of History

ISAAC KING PHELPS, Ph.D.....Assistant Professor of Chemistry

HOWARD LEE MCBAIN, Ph.D....Assistant Professor of Political Science

R. G. STAFFORD, D.V.M.....Assistant Professor of Anatomy

Associates, Instructors, Demonstrators and Assistants.

JOHN B. NICHOLS, M.D.....Associate in Medicine

EDWARD E. MORSE, M.D.....Associate in Obstetrics

JULIAN M. CABELL, M.D.....Associate in Obstetrics

C. S. WHITE, M.D.....Associate in Surgery

H. H. DONNALLY, A.M., M.D.....Associate in Medicine

F. FREMONT-SMITH, M.D.....Associate in Pediatrics

W. F. M. SOWERS, A.B., M.D.....Associate in Surgery

G. BROWN MILLER, M.D.....Associate in Gynecology

B. M. RANDOLPH, M.D.....	Associate in Materia Medica and Therapeutics
HENRY R. ELLIOTT, M.D....	Associate in Physiology and Pharmacology
W. R. BRANDENBURG, M.D....	Associate in Bacteriology and Pathology
L. H. REICHELDERFER, M.D.....	Clinical Associate in Surgery
EDGAR P. COPELAND, M.D.....	Clinical Associate in Pediatrics
DUFF G. LEWIS, M.D.....	Clinical Associate in Surgery
J. T. KELLEY, M.D.....	Clinical Associate in Surgery
W. A. FRANKLAND, M.D.....	Clinical Associate in Gynecology
NOBLE P. BARNES, M.D.....	Instructor in Materia Medica and Therapeutics
SAMUEL H. GREENE, JR., M.D.....	Instructor in Anatomy
HOMER S. MEDFORD, M.D.....	Instructor in Obstetrics
J. L. RIGGLES, M.D.....	Instructor in Anatomy and Gynecology
JOHN WILMER LATIMER, LL.B.....	Instructor in Law
OTIS D. SWETT, M.S., LL.M.....	Instructor in Chemistry
WALTER H. MERRILL, M.D.....	Instructor in Electro-Therapeutics
O. A. M. McKIMMIE, M.D.....	Instructor in Laryngology and Otology
H. S. DYE, M.D.....	Instructor in Laryngology and Otology
ADOLPH A. HOEHLING, JR., LL.M..	Associate Justice of the Moot Court of Appeals
TRUMAN ABBE, M.D.....	Instructor in Physiology and Surgery
J. LAWN THOMPSON, M.D.....	Instructor in Surgery
EVERETT W. VARNEY, A.B.....	Instructor in Physics
ALFRED G. BUHRMAN.....	Clerk of the Moot Court
GEORGE MORTON CHURCHILL, A.M.....	Instructor in History
CHARLES W. MORTIMER, B.S., M.E..	Instructor in Electrical Engineering
F. CHARLES STARR, B.S.....	Instructor in Civil Engineering
ELLERY C. STOWELL, "Docteur en droit"....	Instructor in International Law
W. W. WILKINSON, M.D.....	Instructor in Medicine
GEORGE B. HEINECKE, M.D.....	Instructor in Anatomy
VERGIL B. JACKSON, M.D.....	Instructor in Anatomy and Gynecology
E. T. M. FRANKLIN, M.D.....	Instructor in Surgery
W. J. FRENCH, M.D.....	Instructor in Materia Medica and Pediatrics
A. L. HUNT, M.D.....	Instructor in Surgery
CHARLES W. HYDE, M.D.....	Instructor in Medicine
E. P. MAGRUDER, A.M., M.D.....	Instructor in Anatomy
DANIEL T. BIRTWELL, M.D.....	Instructor in Anatomy
JOHN WINSLOW TAYLOR, D.D.S.....	Instructor in Prosthetic Technics
ADAM KEMBLE, M.D.....	Instructor in Pathology and Gynecology
SOTHORON KEY, M.D.....	Instructor in Medicine

H. G. FULLER, M.D.....	Instructor in Genito-Urinary Surgery and Venereal Diseases
PRESLEY HUNT, M.D.....	Instructor in Anatomy
E. B. JONES, M.D.....	Instructor in Histology and Embryology
CLARA S. LUDLOW, M.D.....	Instructor in Histology and Embryology
ROBERT R. KERN.....	Instructor in Economics
C. B. CONKLIN, M.D.....	Instructor in Medicine
M. E. HARRISON, D.D.S.....	Assistant Demonstrator in the Dental Infirmary
HOWARD M. BRADBURY, Phar.D.....	Assistant in Chemistry
J. WILTON GRADY, Phar.D.....	Assistant in Pharmacy
LOUIS B. CASTELL, Phar.D.....	Assistant in Pharmacy
WILLIAM WEBB SNIFFIN, A.M.....	Assistant in Romance Languages
W. H. I. FLEMING, B.S.....	Assistant in Architecture
DELOS H. SMITH, B.S.....	Assistant in Architecture
WILLIAM P. COLLINS, D.V.S.....	Instructor in Clinical Veterinary Surgery
HULBERT YOUNG, V.M.D.....	Special Lecturer and Demonstrator of Anatomy

Lecturers.

DAVID J. BREWER, LL.D.....	Lecturer on International Law
EDGAR BUCKINGHAM, Ph.D.....	Lecturer of Thermodynamics
FREDERICK E. FOWLE, JR., S.B.....	Lecturer on Astro-Physics
WILLIAM HAMILTON, Ph.D.....	Lecturer on History
JOHN W. FOSTER, LL.D.....	Lecturer on Diplomacy and Treaties
ELMER ELLSWORTH BROWN, Ph.D., LL.D.....	Lecturer on Education
GEORGE E. MYERS, Ph.D.....	Lecturer on Education
WILLARD S. SMALL, Ph.D.....	Lecturer on Education
STEPHEN ELLIOTT KRAMER, B.S.....	Lecturer on Education
JOHN BALL OSBORNE, M.A.....	Lecturer on the Consular Service
A. H. SNOW, LL.B.....	Lecturer on Theory of Colonial Government
PAUL CHARLTON.....	Lecturer on Colonial Administration

Library.

ALFRED F. W. SCHMIDT, A.M.....	Librarian
M. ALICE MATTHEWS, B.L.S.....	Assistant Librarian

ORGANIZATION.

The University embraces:

THE DEPARTMENT OF ARTS AND SCIENCES.

The Faculty of Graduate Studies.

The College of Arts and Sciences.

The College of Engineering and Mechanic Arts.
The College of the Political Sciences.
The Teachers College.
The Division of Architecture.

THE PROFESSIONAL DEPARTMENTS.

The Department of Law.
The Department of Medicine.
The Department of Dentistry.
National College of Pharmacy.
The College of Veterinary Medicine.

THE UNIVERSITY LIBRARY.

The University Library comprehends (1) the Library of the Department of Arts and Sciences, (2) the Law Library, and (3) the Medical Library. It contains over 40,000 volumes.

The Library of the Department of Arts and Sciences includes the Germanic library of the late Professor Richard Heinzel of the University of Vienna, containing 7200 books and pamphlets in Germanic philology and literature, and cognate branches; the Classical Library of the late Professor Curt Wachsmuth, of the University of Leipzig, containing 7900 books and pamphlets in Greek and Roman literature, archæology, and history; the Mount Vernon Alcove of the Political Sciences, containing 3000 volumes in political history, international law, and the social sciences; and the divisional collections in engineering and mechanic arts, architecture, and education. A well-equipped reference and reading-room is open for study and consultation from 9 a. m. to 6.30 p. m. It contains encyclopedias, dictionaries, standard works in general literature and in the various departments of study comprised under University subjects, also leading literary and scientific magazines and reviews. Students may draw books over night, and upon the special recommendation of the professor in charge of the subject concerned, for longer periods.

The Law Library contains 4750 volumes and occupies a special room in the Law Building. It is open from 9 a. m. to 10 p. m.

The Medical Library, including the J. Ford Thompson collection of works on surgery, contains 2650 volumes and is shelved in a room in the Medical School. It is open from 9 a. m. to 10.30 p. m.

Besides, the student has access to the Library of Congress which, steadily perfecting its large collections of standard works in the various

branches of University study, affords exceptional facilities for research. In addition, the Public Library of the District of Columbia is being rapidly equipped with books of special importance to the University student, and its facilities are available under the most favorable conditions. Under certain restrictions, the libraries of the governmental departments may also be utilized. All these libraries are within easy reach of the University.

ANNUAL COMMENCEMENT AND FALL AND WINTER CONVOCATIONS.

The Annual Commencement is held on the second Wednesday in June. The Fall Convocation is held on the third Wednesday in October. The Winter Convocation is held on the 22d of February. Degrees are publicly conferred on Commencement Day and at the Fall and Winter Convocations. Members of the faculties and candidates for degrees are expected to appear in academic caps and gowns.

PRIVILEGES IN GOVERNMENTAL INSTITUTIONS OPEN TO UNIVERSITY STUDENTS.

In order to promote research and the diffusion of knowledge, the Congress of the United States has made the scientific resources of the Government accessible to students under the terms of the following joint resolution, approved April 12, 1892:

"Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the facilities for research and illustration in the following and any other governmental collections now existing or hereafter to be established in the city of Washington for the promotion of knowledge shall be accessible, under such rules and restrictions as the officers in charge of each collection may prescribe, subject to such authority as is now or may hereafter be permitted by law, to the scientific investigators and to students of any institution of higher education now incorporated or hereafter to be incorporated under the laws of Congress or of the District of Columbia, to wit:

1. Of the Library of Congress.
2. Of the National Museum.
3. Of the Patent Office.
4. Of the Bureau of Education.

5. Of the Bureau of Ethnology.
6. Of the Army Medical Museum.
7. Of the Department of Agriculture.
8. Of the Fish Commission.
9. Of the Botanic Gardens.
10. Of the Coast and Geodetic Survey.
11. Of the Geological Survey.
12. Of the Naval Observatory."

Libraries.—In the archives of the State and other Departments and in the statistical bureaus of these Departments are extensive accumulations of original historical documents and data which are invaluable to graduate students in history, political science, economics, sociology, and the allied topics of research. The Library of Congress, the Public Library of the District of Columbia, and the many highly specialized libraries attached to the various Departments of the Government are made easily accessible.

Museums.—In the collections of the National Museum, the Smithsonian Institution, the Army Medical Museum, the Museum of Naval Hygiene, and the departmental museums are found extensive series of specimens of great value to the student of anthropology, archæology, mineralogy, geology, paleontology, biology in all its branches, and other sciences. In the Patent Office are the records of the many inventions that have contributed so materially during our national existence to modify the conditions under which we live. The Army Medical Museum, which is open for inspection daily, presents a field for study superior to any other institution of the kind, either in this country or in Europe. Its library of medical books and periodicals is the best in the world. It has an unrivaled collection of anatomical and pathological specimens, illustrating normal anatomy and the results of disease in every form, and an almost unlimited number of other preparations showing the effect of gunshot wounds and surgical injuries of every kind. It also contains almost numberless crania of every human nationality. In the National Museum is found the most complete and best arranged collection of *Materia Medica* in the world. The drugs are shown in all their processes of manufacture, from the original package to the delicate alkaloid constituting the active principal.

Laboratories.—In the experimental sciences the most notable facilities are available, since in Washington are centered the Weather Bureau,

with its appliances for the study of national problems in meteorology; the Coast and Geodetic Survey, from which the surveys of our territory are carried on and by which the figure of the earth and terrestrial magnetism are experimentally determined; the Hydrographic Bureau, which conducts the surveys of foreign coasts and the study of the oceans; the Bureau of Standards, which standardizes the instruments used in measuring mass, volume, heat, light, electricity, and all other magnitudes; the Geological Survey, which investigates the structure of the earth, ascertains our mineral resources, and supervises the sources of supply and means for distribution and control of water for irrigation purposes; the Department of Agriculture, which exists primarily for conducting original investigations for the benefit of agriculture in all its branches, and is therefore provided with extensively equipped laboratories for the study of chemistry, botany, vegetable physiology, entomology, biochemistry, bacteriology, comparative pathology, parasitology, the physics and chemistry of the soil, forestry, and microscopy; the Naval Observatory and Nautical Almanac Office, where researches in astronomy and navigation are conducted; the Marine Hospital Service, which deals with national problems in hygiene; the Bureaus of Construction and of Steam Engineering of the Navy, having supervision over the designs and construction of our ships; the Bureau of Yards and Docks, having supervision over the engineering operations at our navy yards and naval stations; the Bureau of Equipment, which is charged with the electrical installations for the Navy; the United States Signal Corps, which has supervision over the electrical installations for the Army; the Engineer Corps of the Army, which is charged with river and harbor improvements, and the Light-House Board, which controls the system for lighting our navigable waters.

Of chemical laboratories for conducting the tests of materials, and especially for research work, there are now eighteen attached to the different departments at Washington. An extensive new laboratory is being equipped for the Marine Hospital and Public Health Service. This is the national health department of the Government. In this laboratory and in the laboratories of the Department of Agriculture there are superior facilities for all kinds of bacteriological and chemical investigations, and for the study of biochemistry, comparative pathology, and parasitology. The new laboratories and hospitals of the Army and the Navy also offer many opportunities for instruction.

Washington offers exceptional opportunities for special or advanced work in Mechanical Engineering. The departments of the Govern-

ment charged with designing are all located here. In the Bureaus of Steam Engineering and of Construction and Repair, and Ordnance, of the Navy, are projected a large amount and extensive variety of heavy constructional work. Here is also located the United States Navy or Ordnance Gun Factory. The Ordnance Proving Station is but a few miles down the Potomac. Tours of inspection may be made to the large steel-works and shipbuilding plants in Baltimore, and the shipbuilding plant at Newport News.

PART II.

DEPARTMENTS OF THE UNIVERSITY.

Department of Arts and Sciences.

The Department of Arts and Sciences is organized as follows:

THE FACULTY OF GRADUATE STUDIES

Offers graduate seminary, laboratory, and lecture courses leading to the master's degrees, the engineering degrees (C.E., E.E., M.E.), and the degrees of Doctor of Jurisprudence and Doctor of Philosophy.

THE FACULTY OF UNDERGRADUATE STUDIES

Offers undergraduate courses in arts, philosophy, and science, in the following colleges and divisions:

College of Arts and Sciences.

College of Engineering and Mechanic Arts.

College of the Political Sciences.

Teachers College.

Division of Architecture.

FACULTY OF GRADUATE STUDIES

CHARLES WILLIS NEEDHAM, LL.D. PRESIDENT OF THE UNIVERSITY

JAMES HOWARD GORE, Ph.D. Professor of Mathematics, Emeritus

HOWARD LINCOLN HODGKINS, Ph.D. Professor of Mathematics

HERMANN SCHOENFELD, Ph.D. Professor of German

JAMES MACBRIDE STERRETT, D.D. . . . Professor of Philosophy, Emeritus

CHARLES E. MUNROE, Ph.D. Professor of Chemistry, and Dean

CHARLES CLINTON SWISHER, Ph.D., LL.D. Professor of History

WILLIAM ALLEN WILBUR, A.M. Professor of English

MITCHELL CARROLL, Ph.D. Professor of Classical Languages

GEORGE N. HENNING, A.M. Professor of Romance Languages

*THEODORE N. GILL, Ph.D. Professor of Zoölogy

*FRANK W. CLARKE, Sc.D. Professor of Mineral Chemistry

*HARVEY W. WILEY, Ph.D. Professor of Agricultural Chemistry

* Giving part time to teaching in the University.

- *FRANK H. BIGELOW, L.H.D. Professor of Astro-Physics
- *GEORGE P. MERRILL, Ph.D. Professor of Geology and Mineralogy
- *PAUL BARTSCH, M.S., Ph.D. Professor of Zoölogy
- PERCY ASH, C.E. Professor of Architecture
- *GEORGE LANSING RAYMOND, L.H.D. Professor of Æsthetics
- WILLISTON S. HOUGH, Ph.M. Professor of Psychology and Education
- *HENRY L. ABBOTT, LL.D., Brig.-Gen. U.S.A. Professor of
Hydraulic Engineering
- *GEORGE M. STERNBERG, M.D., LL.D., Surgeon-Gen. U.S.A. Professor
of Preventive Medicine
- *EDWARD B. ROSA, Ph.D. Professor of Physics
- *ASAPH HALL, JR., Ph.D. Professor of Astronomy
- *SHEPHERD IVORY FRANZ, Ph.D. Professor of Experimental Psychology
- HENRY PARKER WILLIS, Ph.D. Professor of Finance
- *ALBERT MANN, A.M., Ph.D. Professor of Botany
- WILLIAM R. VANCE, LL.B., Ph.D. Professor of Law
- ERNEST G. LORENZEN, Ph.B., J.U.D. Professor of Law
- *N. MONROE HOPKINS, Ph.D. Assistant Professor of Chemistry
- CHARLES SIDNEY SMITH, Ph.D. Assistant Professor of Greek and
Latin
- *EDWIN A. HILL, Ph.D. Assistant Professor of Stereo-Chemistry
- PHILANDER BETTS, M.S., E.E. Assistant Professor of Electrical
Engineering
- *TIMOTHY W. STANTON, Ph.D. Assistant Professor of Paleontology
- DEWITT C. CROISSANT, A.B. Assistant Professor of English
- ALFRED F. W. SCHMIDT, A.M. Assistant Professor of German
- EDWIN DUNSTAN, C.E. Assistant Professor of Civil Engineering
- OSCAR A. MECHLIN, C.E. Assistant Professor of Civil Engineering
- ARTHUR C. WILLARD, B.S. Assistant Professor of Mechanical
Engineering
- WILLIAM C. RUEDIGER, Ph.D. Assistant Professor of Educational
Psychology
- *LOUIS COHEN, B.S. Assistant Professor of Mathematics
- WILLIAM RAY MANNING, Ph.D. Assistant Professor of Diplomatic
History
- HOWARD LEE MCBAIN, Ph.D. Assistant Professor of Political Science
- *FREDERICK E. FOWLE, JR., S.B. Lecturer on Astro-Physics
- HARRY CASSELL DAVIS, L.H.D. Secretary
- *EDGAR BUCKINGHAM, Ph.D. Lecturer on Thermodynamics

* Giving part time to teaching in the University.

The Division of Graduate Studies is charged with the development and supervision of research courses leading to the higher degrees. This work was organized at this University in 1893 with a view to enable properly equipped students to avail themselves of the advantages which Washington offers for original investigations. Announcements relative to the official matters of this Division are made by the Dean, and professors and students of this Division are expected to be governed by them.

HIGHER DEGREES.

The higher degrees conferred in course by the University in this Division of the Department of Arts and Sciences are Master of Arts (A.M.), Master of Science (M.S.), Civil Engineer (C.E.), Electrical Engineer (E.E.), Mechanical Engineer (M.E.), Doctor of Jurisprudence (Jur.D.), and Doctor of Philosophy (Ph.D.).

ADMISSION.

Candidates for admission to courses for higher degrees must present the diplomas they hold, or certificates that they have received such diplomas, to the Secretary of the University, and obtain from him application blanks. When properly filled and signed, these applications are to be submitted to the Dean of the Faculty of Graduate Studies, together with catalogues of the institutions from which the candidates hold their degrees and certificates of their course of study at such institutions. All such applications should be accompanied by testimonials as to character and scholarship.

DEGREES OF MASTER OF ARTS AND MASTER OF SCIENCE.

To be admitted to candidacy for the Master's degree a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfils the requirements. Moreover, the courses of study pursued must have been such as to qualify the candidate for pursuing the subjects chosen for the Master's degree. In seeking admission the applicant must state whether he desires to obtain the Specialist degree or the Liberal Culture degree.

The Specialist degree is designed for students who propose to proceed toward the Doctor of Philosophy degree. Such candidates are required to complete one major and two minor subjects selected from properly correlated University subjects approved by the Faculty upon recommendation of the professors in charge and to present a satisfactory dissertation. Only one of the minor topics may be selected from the University subject which includes his major topic. Work for which

this degree has been awarded may be credited as one year of work toward the Doctor of Philosophy degree, provided that it be in the same field of work.

The Liberal Culture degree is designed for students who do not intend to specialize in their work. Such candidates are required to complete three full courses of studies, of two or three hours each, distributed among three University subjects, not more than six hours of which shall be given to any one subject. These subjects must have the approval of the Faculty on the recommendation of the professors in charge. The candidate must also present a dissertation in the field to which his major subject belongs.

A candidate for a Master's degree must pass at least one full year in residence and study at this University, and no work done by him for the Bachelor's degree shall be counted again for a higher degree.

HIGHER DEGREES IN ENGINEERING.

To be admitted to candidacy for higher degrees in Engineering a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree in Engineering, and of such a character as to fit him to pursue to advantage the study of advanced engineering topics. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfils the requirements. Moreover, the courses of study pursued for the Bachelor's degree must be approved by the Faculty as qualifying the candidate for pursuing the chosen line of study for the degree sought.

A candidate for a degree in Engineering shall pass at least one full year of residence and study at this University, sustain satisfactory examinations on the studies pursued and present an acceptable thesis, together with a bibliography. Three full courses is the minimum required as constituting a full year's work. The courses chosen must be passed upon by the Faculty of Graduate Studies and have the approval of the professors under whom they are to be taken.

DOCTOR'S DEGREES.

The degree of Doctor of Jurisprudence or Doctor of Philosophy is conferred upon a student who has pursued specialized courses in University Subjects; engaged in original research in certain of the various departments of law, letters or science under university auspices, for a period of not less than three years; has submitted an acceptable thesis, and has met all the requirements prescribed. The degree is given for high attainments and proved ability to do research work in some special branch of knowledge, as determined by the various tests applied.

Before a student can be admitted to candidacy for the Doctor's degree he must give evidence that he has completed a liberal undergraduate course of academic study such as is required by colleges of good standing antecedent to the baccalaureate degree, and of such a character as to fit him to pursue to advantage researches in the field chosen for graduate work. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfils the requirements. The applicant may be credited with graduate work done at other universities, provided such work is shown to be of grade similar to that required here, but the last year must be spent in residence at this University and the other requirements of the degree as prescribed must be fulfilled.

The candidate for the Doctor's degree shall offer three topics from the University Subjects—one major and two collateral minor studies—the combination to be approved by the Faculty of Graduate Studies. These must be pursued under the guidance of a committee consisting of the professors in charge of the University Subjects in which the studies are pursued, with the professor in the major subject as chairman. This committee will determine his division of time, study, and research among the major and minor topics, but in general the major topic should be pursued during the whole time devoted to graduate work, and each minor topic during at least one year. The candidate shall pass satisfactory examinations upon the three subjects selected. He must satisfy the Faculty that he can read understandingly, in the original, French and German works pertaining to his special field. In order to graduate the candidate must possess a broad acquaintance with his major subject and he must present a dissertation upon some topic approved by the professor in charge of his major subject, which shall be a contribution to knowledge and which shall be accompanied by an adequate bibliography.

EXAMINATIONS.

Candidates must pass written examinations upon all their topics. The examinations upon the minor topics may be taken at the close of the respective years in which these topics are completed, or later, at the discretion of the examiner. The final written examination on the major topic shall cover the candidate's entire university work, and shall be given when the professor of that subject is satisfied that the student has taken sufficient work to warrant such an examination being taken.

Every candidate for a Doctor's degree must pass an oral examination in all these subjects, and must defend his dissertation in the presence of the Faculty of Graduate Studies, or of so many of its members as may desire or may be designated by the Faculty to attend, and such other

specialists as it may invite. The oral examination will not be confined to the dissertation nor to courses of study pursued at this University, but the candidate is expected to show a satisfactory knowledge of his major subject as a whole, and a general acquaintance with the broader field of knowledge of which this subject forms a part. If a student has satisfactorily passed his final written examinations, he may be permitted to complete his dissertation away from the University and to postpone the taking of his oral examination until he has thus completed his dissertation.

The subjects from which the candidate's selection may be made, as the Faculty may determine in each case, are as follows:

Agriculture, Applied Mathematics, Architecture, Astronomy, Astrophysics, Bacteriology, Botany, Chemistry, Classical Archæology, Economics, Education, Civil Engineering, Electrical Engineering, Hydraulic Engineering, Mechanical Engineering, English, Ethics, Geology and Mineralogy, Germanic Languages and Literature, Greek Language and Literature, Histology and Embryology, History, International Law and Diplomacy, Latin Language and Literature, Law, Mathematics, Meteorology, Pathology, Philosophy, Physics, Physiology and Pharmacology, Political Sciences, Preventive Medicine, Psychology, Romance Language and Literature, Semitic Languages and Literature, Sociology, Zoölogy.

DEGREE OF DOCTOR OF JURISPRUDENCE.

Candidates for this degree must hold the degree of Bachelor of Law from this University or from some other institution requiring equivalent work as a prerequisite for this degree, in addition to satisfying the requirements for admission to candidacy for a Doctor's degree set forth above. He must possess a reading knowledge of Latin, French, and German. His major topic, and at least one of his minor topics, must be in subjects taught in the Department of Law and Jurisprudence, but the other minor may be chosen from any University Subject which is properly related to his major topic. The degree is given for high attainments and proved ability to do research work in some special branch of law, as determined by the various tests applied.

DEGREE OF DOCTOR OF PHILOSOPHY.

Candidates for this degree may, with the approval of the Faculty upon recommendation of the professors in charge, select their topics from properly correlated University Subjects, but only one of the minor topics may be in the subject which includes the major topic. He must by the tests applied prove his ability to do research work and his thorough acquaintance with the literature of the subject of which his dissertation treats.

REGULATIONS REGARDING DISSERTATIONS.

Dissertations must be presented to the Dean not later than May 1 for graduation in June, or January 3 for graduation at the Winter Convocation. They must be typewritten on official dissertation paper, which may be obtained from the Treasurer of the University. The dissertation will be presented by the Dean to the Faculty, and by it referred to a committee for examination as to its merit. After their acceptance, dissertations, with their accompanying drawings, are the property of the University, and must be deposited in the University archives, but the authors of them are permitted to make copies. The candidate shall arrange, to the satisfaction of the Faculty, to print his dissertation within one year after the degree is granted, under the supervision of the professor in charge of his major subject, and shall present one hundred copies to the University, to be distributed among institutions of learning.

DOCTORATE DISPUTATIONS.

A Doctorate Disputation was held publicly in University Hall, May 25, 1908. The theses that were successfully defended, the candidates, and the members of the boards of experts were as follows:

Thesis: Phosphorus metabolism experiments. By FRANK CUMMINGS COOK, B.A., 1900; M.A., 1902; M.S., 1904, Yale University. Before Professor GEORGE M. KOBER, M.D., Dean Medical Department, Georgetown University; REID HUNT, PH.D., Chief of Division of Pharmacology, Public Health and Marine Hospital Service; WILLIAM O. EMERY, PH.D., Organic Chemist, Bureau of Chemistry, U. S. Department of Agriculture. Assistant Professor EDWARD G. SEIBERT, M.D., presiding.

Thesis: The overthrow of the concordat by the third republic. By BENJAMIN GEORGE WILKINSON, B.A., 1897, University of Michigan; M.A., 1905, Union College. Before Hon. HANNIS TAYLOR, LL.D.; Rev. FRANK SEWALL, S.T.D.; HOWARD H. MABLETT COOK, PH.D. Professor CHARLES C. SWISHER, PH.D., LL.D., presiding.

A midwinter Doctorate Disputation was held publicly in University Hall, Monday, February 1, 1909, as follows:

Thesis: Economic geology of the Kenova quadrangle in Kentucky, Ohio, and West Virginia. By WILLIAM CLIFTON PHALEN, S.B., 1899; S.M., 1902, Massachusetts Institute of Technology. Before J. S. DILLER, B.S., Geologist, United States Geological Survey; EDWARD O. ULRICH, Sc.D., Geologist, United States Geological Survey; DAVID WHITE, B.S., Geologist, United States Geological Survey. Professor GEORGE P. MERRILL, PH.D., presiding.

A Doctorate Disputation was held publicly in University Hall, May 24, 1909. The theses that were successfully defended, the candidates, and the members of the Board of Experts were as follows:

Thesis: The effect of cold storage on chicken meat. By HARRY WILSON HOUGHTON, B.S., 1906; M.S., 1907, The George Washington University. Before W. D. BIGELOW, PH.D., Chief, Division of Foods, U. S. Department of

Agriculture; J. H. KASTLE, Ph.D., Chief, Division of Chemistry, Hygienic Laboratory, U. S. Public Health and Marine Hospital Service; C. F. LANGWORTHY, Ph.D., Chief, Nutrition Investigations, Office of Experiment Stations. Assistant Professor THOMAS M. PRICE, Ph.D., presiding.

Thesis: The possibility of shellfish contamination from sewage-polluted waters. By GEORGE WHITFIELD STILES, JR., B.S., 1900, Oklahoma Agricultural and Mechanical College; M.D., 1905, The George Washington University. Before BENJAMIN MEADE BOLTON, M.D., Expert in Experimental Therapeutics, Bureau of Animal Industry; Lt.-Col. W. C. BORDEN, U.S.A. (retired), M.D.; JOHN R. MOHLER, V.M.D., Chief, Pathological Division, Bureau of Animal Industry. Professor GEORGE M. STERNBERG, M.D., LL.D., Surgeon-General U. S. A. (retired), presiding.

Thesis: Martin Luther's political reforms of Germany. By LUTHER HESS WARING, B.A., 1905, The George Washington University; M.A., 1904, Columbian University. Before Rev. GEORGE BRODTHAGE, Ph.D., D.D.; Hon. HANNIS TAYLOR, LL.D.; Rev. CHARLES WOOD, D.D. Professor HERMANN SCHOENFELD, Ph.D., LL.D., presiding.

UNIVERSITY FELLOWSHIPS.

The Board of Trustees established five Fellowships in Graduate Studies, which became available for the academic year of 1908-1909. One of these Fellowships yields \$600; two, \$500, and two, \$400 per annum, but they do not exempt the holder from the charges for tuition. The holders of these Fellowships are expected to teach Undergraduate classes not less than two, nor more than eight hours a week in the departments of instruction in which they are pursuing graduate work. These Fellowships are to be bestowed upon candidates who take regular Graduate courses with a view to the Doctor of Philosophy degree and expect to devote their lives to teaching or research in some branch of science, politics or letters. The appointments for the session of 1909-10 are filled by the Committee on Fellowships under the following regulations:

1. The application should be made in writing, to the Dean of the Faculty of Graduate Studies, and he will refer the papers to the Committee on Fellowships, by whom the appointments are made. Hereafter applications for Fellowships for the next session should be on file by May 1.

2. Testimonials and references should accompany the application. The candidate must give evidence of a liberal education, such as a Bachelor's degree from a college in good repute; of decided capacity for research, such as a piece of scientific or literary work already performed; and of upright character and high attainments, such as testimonials from former instructors.

3. In making appointments, the Committee will first consider candidates who have already done graduate work in this University, then candidates who have done graduate work in other universities, then candidates who have engaged in research under other than university

auspices, but in every case the final decision will be determined by fitness for the Fellowship awarded.

4. Every holder of a Fellowship is expected to give from two to eight hours of instruction in the departments of the University in which he is a candidate for a degree.

5. He must reside in Washington during the academic year, and will be expected to devote his time to the prosecution of his special studies, under the direction of the professors in charge, with a view to the attainment of the Ph.D. degree. He may not engage in any occupation outside of his regular University duties without leave of the Committee on Fellowships.

6. He may be reappointed at the end of the year, but only for exceptional reasons.

7. Doctors of Philosophy of this and other universities of high grade may be appointed Fellows by Courtesy in this University and enjoy all its opportunities for research without charge.

TEACHING FELLOWS.

HOWARD BISHOP LEWIS, B.A. Teaching Fellow, Department of Chemistry

PHILIP JOHNSON, A.M., B.D. Teaching Fellow, Department of Philosophy

THE FACULTY OF UNDERGRADUATE STUDIES.

CHARLES WILLIS NEEDHAM, LL.D. PRESIDENT OF THE UNIVERSITY

JAMES HOWARD GORE, Ph.D. Professor of Mathematics, Emeritus

HOWARD LINCOLN HODGKINS, Ph.D. Professor of Mathematics, and
Dean of the College of Engineering and Mechanic Arts

HERMANN SCHOENFELD, Ph.D., LL.D. Professor of German

JAMES MACBRIDE STERRETT, A.M., D.D. Professor of Philosophy,
Emeritus

CHARLES EDWARD MUNROE, Ph.D. Professor of Chemistry, and Dean
of the Faculty of Graduate Studies

*GEORGE P. MERRILL, Ph.D. Professor of Geology and Mineralogy

WILLIAM ALLEN WILBUR, A.M. Professor of English, and Dean of
the College of Arts and Sciences

CHARLES CLINTON SWISHER, Ph.D., LL.D. Professor of History

MITCHELL CARROLL, Ph.D. Professor of Classical Languages

*PAUL BARTSCH, Ph.D. Professor of Zoölogy

GEORGE N. HENNING, A.M. Professor of Romance Languages

PERCY ASH, C.E. Professor of Architecture, and Dean

*GEORGE LANSING RAYMOND, L.H.D. Professor of Æsthetics

ALBERT BURNLEY BIBB. Professor of Architecture

* Giving part time to teaching in the University.

- WILLISTON S. HOUGH, Ph.M..Professor of Psychology and Education,
and Dean of the Teachers College
- *JAMES BROWN SCOTT, M.A., J.U.D....Professor of International Law
- *ALBERT MANN, Ph.D.....Professor of Botany
- HARRIETT STRATTON ELLIS, A.B.....Dean of Women
- HENRY PARKER WILLIS, Ph.D.....Professor of Finance
- CHARLES SIDNEY SMITH, Ph.D.....Professor of Greek and Latin
- *NEVIL MONROE HOPKINS, Ph.D.....Assistant Professor of Chemistry
- PHILANDER BETTS, E.E..Assistant Professor of Electrical Engineering
- *EDWIN A. HILL, Ph.D.....Assistant Professor of Chemistry
- *THOMAS MALCOLM PRICE, Ph.D....Assistant Professor of Chemistry
- *RAY SMITH BASSLER, Ph.D.....Assistant Professor of Geology
- PAUL N. PECK, A.M.....Assistant Professor of Mathematics
- DE WITT C. CROISSANT, A.B.....Assistant Professor of English
- ALFRED F. W. SCHMIDT, A.M.....Assistant Professor of German
- EDWIN V. DUNSTAN, C.E....Assistant Professor of Civil Engineering
- OSCAR A. MECHLIN, C.E....Assistant Professor of Civil Engineering
- ARTHUR CUTTS WILLARD, B.S.....Assistant Professor of Mechanical
Engineering
- WILLIAM RAY MANNING, Ph.D.....Assistant Professor of History
- WILLIAM CARL RUEDIGER, Ph.D....Assistant Professor of Educational
Psychology
- †CHARLES MASON REMEY.....Assistant Professor of Architecture
- JAMES FREDERICK PEAKE, A.M.....Assistant Professor of History
- HOWARD LEE MCBAIN, Ph.D..Assistant Professor of Political Science
- OTIS D. SWETT, M.S., LL.M.....Instructor in Chemistry
- EVERETT W. VARNEY, A.B.....Instructor in Physics
- F. CHARLES STARR, B.S.....Instructor in Civil Engineering
- ELLERY C. STOWELL, "Docteur en droit"..Instructor in International
Law
- CHARLES W. MORTIMER, B.S.....Instructor in Electrical Engineering
- *GEORGE MORTON CHURCHILL, A.M.....Instructor in History
- ROBERT R. KERN.....Instructor in Economics
- WILLIAM WEBB SNIFFIN, A.M.....Assistant of Romance Languages

EXECUTIVE FACULTIES.

College of Arts and Sciences.

DEAN WILBUR, Professors MUNROE, CARROLL, HENNING, Assistant
Professors SCHMIDT, PEAKE, PECK.

* Giving part time to teaching in the University.

† Absent on leave.

College of Engineering and Mechanic Arts.

Dean HODGKINS, Professors SCHOENFELD, MERRILL, Assistant Professors BETTS, PECK, CROISSANT, DUNSTAN, MECHLIN, WILLARD.

College of the Political Sciences.

Dean McBAIN, Professors SWISHER, LORENZEN, SCOTT, WILLIS, and Assistant Professor MANNING.

Teachers College.

Dean HOUGH, Professors BARTSCH, SMITH, FRANZ, Assistant Professors CROISSANT, RUEDIGER, and Dr. MYERS.

Division of Architecture.

Dean ASH, Professors RAYMOND, BIBB, Assistant Professor REMEY.

COLLEGE OF ARTS AND SCIENCES

The session of 1909-1910 begins Wednesday, September 29, 1909.

The College of Arts and Sciences is open to men and women. The courses of study are conducted mainly in the University Building, corner Fifteenth and H streets, N. W. The office of the Dean is in this building.

The Woman's Building, within four minutes' walk, is situated at 1538 I street.

ADMISSION.

Every applicant for admission is required to present a testimonial of good character, and also a certificate of standing and regular dismissal from the school or college which he has attended or from the tutor with whom he has studied.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required subjects. Certificates, in lieu of any or all examinations, will be accepted from schools whose work is attested by well-prepared students admitted to the University in previous years, and from schools desiring coöperation with the University, that present evidence of affording adequate preparation in the required subjects. The Secretary of the University will, on application, furnish certificate blanks to the principals of such accredited schools.

The certificate of the College Entrance Examination Board will be accepted in so far as the subjects specified meet the requirements for admission.

The requirement for admission is a four-year high school course, or its equivalent, amounting to fifteen "units." A unit is a subject studied one school-year of five periods a week. Seventy-five such periods or "counts" make the fifteen-unit requirement.

These fifteen units must include English, 3 units; Mathematics, 2 units; and one of the following languages: Latin, 4 units; Greek, 3 units; French, 2 units; German, 2 units; or Spanish, 2 units. The remainder of the requirement is elective and may be satisfied in general by any high school subject approved by the College Entrance Examination Board. Subjects that will be accepted are described in the following pages under "Definition of Requirements."

EXAMINATIONS FOR ADMISSION.

The regular examinations for admission to the Freshman Class are held in University Hall, corner of Fifteenth and H streets, N. W.,

during the week preceding the Commencement. The following is the schedule for the examination:

May 31, 1910.

Registration of Applicants at the Dean's office.....	8.30- 9.00
Elementary Latin	9.00-11.00
Plane Geometry	11.00- 1.00
Physics	2.00- 4.00
Greek	2.00- 5.00

June 1.

Elementary Algebra	9.00-11.00
Elementary French	11.00- 1.00
German	2.00- 4.00
Ancient History	4.00- 6.00

June 2.

Plane Trigonometry	9.00-11.00
Advanced French, Advanced German.....	11.00- 1.00
English	2.00- 5.00

June 3.

Advanced Algebra	9.00-11.00
Solid Geometry	11.00- 1.00
Chemistry; Advanced Latin.....	2.00- 4.00
English History	4.00- 6.00

Subjects offered for admission, but not named in the schedule of examinations, will be arranged for as occasion arises.

Unless admitted by certificate, every undergraduate candidate for a degree is required to pass an examination.

DEFINITION OF REQUIREMENTS.

ENGLISH.

(Counting three units.)

No candidate will be accepted in English whose work is notably defective in point of spelling, punctuation, idiom, or division into paragraphs.

a. READING AND PRACTICE—one and one-half units. The form of examination will usually be the writing of a paragraph or two on each of several topics to be chosen by the candidate from a considerable number—perhaps ten or fifteen—given in the examination paper. The treatment of these topics is designed to test the candidate's power of clear and accurate expression, and will call for only a general knowl-

edge of the substance of the books. *In every case knowledge of the book will be regarded as less important than the ability to write good English.* In preparation for this part of the examination, it is important that the candidate shall have been instructed in the fundamental principles of rhetoric.

Candidates should read the books prescribed for the year in which they propose to present themselves for this part of the examination.

In 1909, 1910, and 1911, the ten books for reading and practice selected from the list recommended by the Conference on Uniform Entrance Requirements in English, are as follows:

Shakespeare's *As You Like It* and *Julius Cæsar*; *The Sir Roger de Coverley Papers* in the Spectator; Chaucer's *Prologue*; Thackeray's *Henry Esmond* and Dickens' *A Tale of Two Cities*; Lamb's *Essays of Elia* and Ruskin's *Sesame and Lilies*; Coleridge's *The Ancient Mariner* and Tennyson's *Gareth*; and *Lynette, Lancelot and Elaine*, and *The Passing of Arthur*.

A candidate may, by giving due notice, substitute any other list that conforms to the requirements recommended by the Conference on Uniform Entrance Requirements in English.

b. STUDY AND PRACTICE—one and one-half units. This part of the examination presupposes the thorough study of each of the works named below. The examination will be upon subject-matter, form, and structure. In addition, the candidate may be required to answer questions involving the essentials of English grammar, and questions on the leading facts in those periods of English literary history to which the prescribed works belong.

The books set for this part of the examination will be:

1909, 1910, 1911: Shakespeare's *Macbeth*; Milton's *Lycidas*, *Comus*, *L'Allegro*, and *Il Penseroso*; Burke's *Speech on Conciliation with America*, or Washington's *Farewell Address* and Webster's *First Bunker Hill Oration*; Macaulay's *Life of Johnson*, or Carlyle's *Essay on Burns*.

LATIN.

Elementary (counting two units).

a. i. Latin Grammar: The inflections; the simpler rules for composition and derivation of words; syntax of cases and the verbs; structure of sentences in general, with particular regard to relative and conditional sentences, indirect discourse, and the subjunctive.

ii. Latin Prose Composition: Translation into Latin of detached sentences and easy continuous prose based upon Cæsar.

b. Cæsar: Any four books of the Gallic War, preferably the first four.

Advanced (counting two units).

- a. Cicero: Any six orations from the following list, but preferably the first six mentioned:

The four orations against Catiline, Archias, the Manilian Law, Marcellus, Roscius, Milo, Sestius, Ligarius, the Fourteenth Philippic.

- b. Vergil: The first six books of the *Æneid*.
 c. Advanced Prose Composition, consisting of continuous prose of moderate difficulty based on Cicero.
 d. Sight Translation, based on prose of no greater difficulty than the easier portions of Cicero's orations.

GREEK.

Elementary (counting two units).

- a. i. Greek Grammar: The topics for the examination in Greek grammar are similar to those detailed under Latin grammar.
 ii. Greek Prose Composition, consisting principally of detached sentences to test the candidate's knowledge of grammatical constructions.

The examination in grammar and prose composition will be based on the first two books of Xenophon's *Anabasis*.

- b. Xenophon: The first four books of the *Anabasis*.

Advanced (counting one unit).

- a. *Homer*: The first three books of the *Iliad* (omitting II, 494, to end).
 b. Sight Translation, based on prose of no greater difficulty than Xenophon's *Anabasis*.

FRENCH.

Elementary (counting two units). Candidates in Elementary French must have a good knowledge of the essential parts of grammar, with stress on pronouns and on regular verbs and the common irregular verbs. They must know the principles of pronunciation; must be able to translate simple English sentences or easy connected prose into French, and to translate accurately ordinary modern French prose. Candidates must have translated not less than 450 duodecimo pages by at least four different authors, of which amount at least one-third must be history. Candidates must have had a two-years' course of five periods per week.

Advanced (counting two units). Candidates in Advanced French must have partly translated, partly read, in addition to the requirements for Elementary French, at least 1000 pages of difficult French of several different authors, including history, fiction, drama, and

poetry. Candidates must have had a four-years' course of five periods per week.

Fraser and Squair's French Grammar or Grandgent's Essentials of French Grammar is recommended.

SPANISH.

(Counting two units.)

Candidates in Spanish must have a good knowledge of grammar, including syntax, with stress on pronouns and verbs, regular and irregular. They must know the principles of pronunciation. They must be able to translate simple English sentences or easy connected prose into Spanish, and to translate accurately fairly difficult modern Spanish prose and verse. Candidates must have translated not less than 500 pages by at least four different authors, of which amount at least one-fourth must be history or drama. Candidates must have had a two-years' course of five periods per week.

GERMAN.

Elementary (counting two units). Candidates in Elementary German must have had a two-years' course of five periods a week. They must be able to read fluently at sight and to translate easy narrative prose and poetry. An accurate knowledge of an elementary German grammar is requisite, to be tested by the translation into German of some fifteen sentences. About 300 pages of graduated narrative prose, one short play, and such poetry as is usually found in a First Reader will be considered an adequate preparation.

Advanced (counting two units). Candidates in Advanced German must have had a four-years' course of five periods a week. They should be well trained in the syntactical laws of the language, have read about 800 pages of good literature in prose, preferably such prose works as are given in the Report of the Committee of Twelve of the Modern Language Association, and poetry, especially dramas by Lessing, Schiller, and Goethe, and studied an elementary history of German literature. German composition should comprise a number of short themes upon assigned historical or literary topics, lives of the authors read, etc.

HISTORY.

In this subject special importance is attached to preparation in geography.

Ancient (counting one unit).

- a. Greek History, through the Roman Conquest; as much as is contained in Myer's, Bottsford's, or West's History of Greece.

- b. Roman History; as much as is contained in Allen's, Bottsford's, or West's History of the Roman People.

Mediæval and Modern European History (counting one unit). As much as is contained in Myer's History of Mediæval and Modern Europe.

English History (counting one unit). As much as is contained in Larned's or Cheyney's History of England.

American History with the Elements of Civil Government (counting one unit). As much as is contained in Fiske's History of the United States, and Fiske's Civil Government.

MATHEMATICS.

Elementary Algebra (counting one unit).

- i. Algebra to Quadratics:

The four fundamental operations for rational algebraic expressions, factoring, highest common factor, lowest common multiple, complex fractions, the solution of equations of the first degree containing one or more unknown quantities, radicals, including the extraction of the square root of polynomials and numbers, and fractional and negative exponents.

- ii. Quadratics, etc.:

Quadratic equations and equations containing one or more unknown quantities that can be solved by the methods of quadratic equations, problems depending upon such equations, ratio and proportion, and the binomial theorem for positive integral exponents.

Advanced Algebra (counting one-half unit).

- i. Progressions, etc.:

The progressions, the elementary treatment of permutations and combinations, and the use of four and five place tables and logarithms.

- ii. Series, etc.:

Undetermined coefficients, the elementary treatment of infinite series, the binomial theorem for fractional and negative exponents, and the theory of logarithms.

- iii. Theory of equations:

Determinants and the elements of the theory of equations, including Horner's method for solving numerical equations.

Plane Geometry (counting one unit).

General text propositions, including the solution of simple original exercises and numerical problems.

Solid Geometry (counting one-half unit).

Properties of straight lines and planes, of dihedral and polyhedral angles, of projections, of polyhedrons, including prisms, pyramids, and the regular solids; of cylinders, cones, and spheres, of spherical triangles and the measurement of surfaces and solids.

Plane Trigonometry (counting one-half unit).

The definitions and relations of the six trigonometrical functions as ratios, proof of important formulas, theory of logarithms and use of tables, solution of right and oblique plane triangles.

PHYSICS.

(Counting one unit.)

It is recommended that the candidate's preparation should include:

- a. Individual laboratory work, comprising at least thirty-five exercises well distributed over the subjects of physics.
- b. Instruction by lecture-table demonstrations.
- c. The study of at least one standard text-book, supplemented by the use of many and varied numerical problems. The metric system should be familiar to the student.

The laboratory note book must be submitted for inspection, whether the candidate is admitted on certificate or by examination.

CHEMISTRY.

(Counting one unit.)

The candidate's preparation in chemistry should include:

- a. Individual laboratory work, comprising at least forty experiments of a character analogous to those set forth by the College Entrance Examination Board.

On application for admission to this University, every candidate seeking credit in chemistry must present an indexed note book in which he has recorded the steps and the results of his laboratory exercises, bearing an endorsement of the teacher who directed the student, written in ink on the inside of the cover.

- b. Instruction by lecture-table demonstrations to be used in instructing the student as to methods of manipulation and as a basis for questioning him upon the general principles involved in his laboratory experiments.

- c. The study of at least one modern text-book, to the end that the student may gain a comprehensive and connected view of the most important facts and laws of elementary chemistry.

Requirements. The ground to be covered should include the following: The chief physical and chemical characteristics, the isolation and

the recognition of the following elements and the preparation and study of their principal compounds: *Oxygen, hydrogen, carbon, nitrogen, chlorine, bromine, iodine, fluorine, sulphur*, phosphorus, silicon, potassium, *sodium*, calcium, magnesium, *zinc*, copper, mercury, silver, aluminium, *lead*, tin, *iron*, manganese, chromium.

The more detailed study should be confined to the italicized *elements* (as such) and to a restricted list of compounds, such as water, hydrochloric acid, carbon monoxide, carbon dioxide, oxides of nitrogen, nitric acid, ammonia, sulphur dioxide, sulphuric acid, hydrogen sulphide, sodium hydroxide, ammonium hydroxide.

Attention should be given to the atmosphere (constitution and relation to animal and vegetable life) flame, acids, bases, salts, oxidation and reduction, crystallization, combining proportions by weight and volume, calculations founded on these and on Boyle's and Charles' laws, symbols, formulas, equations and nomenclature, atomic theory, atomic weights, nascent state, natural groupings of the elements solution (solvents and solubility of gases, liquids, and solids), strength of acids and bases, conservation and dissipation of energy, chemical energy and electrolysis, and of valence, electrolytic dissociation, osmosis, mass action in a very elementary way. Chemical terms should be clearly understood, and the student should be able to illustrate and apply the ideas that they embody. The theoretical topics are not intended to form separate subjects of study, but to be taught only so far as is necessary for the correlation and explanation of the experimental facts. The facts should be given as examples from various classes and not as isolated things.

BOTANY.

(Counting one unit.)

Candidates must have had at least one year's full work in botany, comprising the general principles of morphology, physiology, and ecology, as well as the natural history of plant groups and classification. Bergen's Foundations of Botany and Atkinson's Elementary Botany indicate the general scope of the work required.

ZOÖLOGY.

(Counting one unit.)

In general, zoölogy is not recommended as an entrance subject unless the subject has been preceded or accompanied by that of physics and chemistry, which form the most desirable groundwork for collegiate courses in biology. The entrance examination in zoölogy is designed to test, first, the candidate's practical acquaintance with the natural history, structure, and relationships of some of the leading types of animals, and, second, his knowledge of the more essential facts of physiology.

Practical Zoölogy. A practical examination of at least ten common animal types, and the presentation by the candidate of a laboratory note book, certified by the teacher, as evidence of a laboratory course actually performed. Examples of the types suggested are the frog, fish, mollusk, insects, crustaceans, annelid, starfish, hydroid (hydra), and protozoan. In the examination less weight is laid on a knowledge of anatomical *minutiæ* than on the ability to recognize the specimen and its allies, to indicate its relationship, and to point out the leading features of its life history, organization, and physiology.

Elementary Physiology. The nature of foods and their history in the body; the essential facts of digestion, absorption, circulation, secretion, excretion and respiration; the motor, nervous, and sensory functions, and the structure of the various organs by which these operations are performed. Martin's *Human Body* (briefer course) forms a suitable basis for this work, but teachers are recommended as far as possible to correlate the physiology of man and the higher animals with that of the lower forms studied in the course of practical zoölogy.

PHYSIOGRAPHY.

(Counting one unit.)

The equivalent of Davis' Physical Geography is required, together with an approved laboratory and field course of at least forty exercises actually performed by the candidate.

The candidate will be required to present at the time of his examination the original note book in which he recorded, with dates, the steps and results of his laboratory exercises. This book, which should contain an index of subjects, must bear the endorsement of the teacher, certifying that it is a true record of the candidate's work.

POLITICAL ECONOMY.

(Counting one unit or two units.)

A course in Political Economy based on the contents of Ely and Wicker's text-book, or upon a similar text, will count to the extent of one unit; while a course based on Bullock's Introduction to the Study of Economics or a work of similar scope may be counted to the extent of two units.

DRAWING.

(Counting one unit.)

The candidate's preparation in drawing should include simple geometrical planes and solid figures and simple pieces of machinery, with a fair knowledge of the rules of perspective and light and shade as ap-

plied in freehand sketching. The candidate should be able to reproduce from a flat copy with enlargement or reduction of size.

For courses in architecture, the preparation should include, in addition to the above, the drawing of simple pieces of architectural ornament (a Greek anthemium, a design of iron scrollwork, etc.).

For courses in engineering the preparation should include the copying of machinery details.

For courses in general science or in science for teachers, the preparation should include the copying of still life and simple plant forms.

MANUAL TRAINING SCHOOL SUBJECTS.

SHOPWORK.

(Counting two units.)

Candidates who have been trained in manual-training schools or in commercial shops in the use of tools and in the ordinary processes employed in the working of wood or metal may receive admission credits for such work. They should submit letters from their teachers or employers, stating the character of the work in which they have been trained and the time given to it. The amount of credit will vary according to circumstances, but it will not exceed two units.

DOMESTIC SCIENCE AND DOMESTIC ART.

(Counting two units.)

Domestic Science and Domestic Art, studied in manual-training courses and duly certified, may be credited as College entrance subjects to the extent of two units.

BUSINESS HIGH SCHOOL SUBJECTS.

Commercial subjects studied in the courses of business high schools or schools of similar grade, and duly certified may be credited as College entrance subjects as follows:

Accounting and Finance. (Counting one unit.)

Advanced Bookkeeping and Industrial Problems. (Counting two units.)

Business Organization. (Counting one unit.)

Commercial Law. (Counting one unit.)

Commercial History and Government. (Counting one unit.)

ADMISSION TO ADVANCED STANDING.

Candidates for admission to advanced classes in any department are examined in all indispensable preliminary studies.

Due credit is given for properly certified courses of study pursued in other colleges and universities.

ADMISSION TO SPECIAL COURSES.

All the courses of instruction are open to students of suitable age and attainments who wish, without reference to any degree, to pursue special studies. Candidates must show that they are familiar with the subjects preliminary to the studies which they wish to pursue.

REQUIREMENTS FOR DEGREES.

The undergraduate degrees offered by the College of Arts and Sciences are Bachelor of Arts and Bachelor of Science in Chemistry. To be recommended for either of these degrees, the student must be registered for at least one academic year, must satisfy the admission requirements, and must complete at least sixty "hours" of undergraduate courses.

An "hour" of credit is one hour of recitation or lecture work a week or one laboratory period a week for one academic year. Except in the last year of the course no student taking less than six hours of work will be registered as a regular student. But no time limit for the course is prescribed and the degree is given when the total of prescribed and elective courses is completed.

One grade of special distinction is recognized in awarding the bachelor's degree. It is shown by inserting the words "With Distinction" on the diploma after the name of the degree. It is awarded under the following conditions:

"That the names of all students who have received a mark of at least B (90 per cent) on courses representing at least sixty (60 per cent) of all hours taken by them be submitted by the Dean to the Faculty of the Department in which the students shall be studying for a degree, after the completion of all final examinations in such students' final year of study for their degree;

"That the faculty, after separate consideration of each individual case, shall, if it see fit, recommend the awarding of the degree 'With Distinction' to students who shall have fulfilled the conditions above specified."

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS.

To be recommended for the degree of Bachelor of Arts, the student must complete courses of study including a group of prescribed subjects, and aggregating at least sixty "hours."

There are six groups of prescribed subjects for the first two years of the college course. Every candidate for the degree of Bachelor of Arts elects one of these groups of prescribed subjects, and thereafter he is not permitted to change to another group except on condition that he fulfill the requirements of the group to which he changes.

The studies of the last two years of the course in the College of Arts and Sciences are elective, subject only to such administrative supervision as will insure the general consistency and the liberal character of the courses selected.

The scope of the six groups of prescribed subjects is a provision alike for the diversity in the subjects of the secondary school curriculum leading to a college course, and the needs of the various graduate and professional courses of study in the University for which the college course is a preparation.

Group I emphasizes Latin and Greek studies, and it would naturally be taken by students whose preparatory work has included four years of Latin. Group II emphasizes the Modern Languages, affording to students whose preparation has not included Latin, the humanistic influences of the literatures of the Modern Languages. Group III emphasizes Mathematics and the Natural Sciences, and would naturally be selected by the student whose college preparation has been scientific rather than literary. Group IV consists of such studies as would lead to the Teachers College, including important general culture courses and a considerable number of electives to be chosen from the subjects that the student expects to teach. Group V consists of such studies as would constitute needed preparation for the Department of Law or for the College of the Political Sciences. Group VI consists of the subjects that should be taken by those intending to enter the Department of Medicine. The six groups are as follows:

(NOTE: Whenever in the following groups French or German is taken, if it is elementary, the same language shall be continued the succeeding year.)

GROUP I.

	Hours.
English	6
History	3
Languages ¹	9
Latin	6
Mathematics	3
Philosophy	3
	—
	30

¹ To be elected from Greek, French, German.

GROUP II.

	Hours.
English	6
French ²	3
German	6
History	6
Mathematics or Science	3
Philosophy or Psychology.....	3
Romance Language ²	3
	—
	30

GROUP III.

	Hours.
English	3
History	3
Mathematics	6
Modern Languages	6
Psychology or Philosophy.....	3
Science	5
Electives	4
	—
	30

GROUP IV.

	Hours.
English	3
French, German, Latin or Greek.....	3
History	3
Mathematics or Science.....	3
Psychology	3
Philosophy, Economics or History.....	2 or 3
Science of Languages.....	5 or 6
	—
	22 or 24

The remaining hours are elective from the subjects named with a maximum limitation of 10 units in any one subject.

² French shall be taken the first year; if this is elementary French the language shall be continued the second year; if not, there may be election from French or Spanish or Italian.

GROUP V.

	Hours.
Economics	3
English	6
History	7
Mathematics	3
Modern Languages or Latin.....	6
Science	3
Electives	3
	—
	31

GROUP VI.

	Hours.
English	3
German	3
History	3
Mathematics	3
Psychology	3
Sciences :	
Chemistry, 1, 3, 23.....	7
Physics, 1, 2.....	5
Biology	5
	—
	32

REQUIREMENTS FOR THE DEGREE OF BACHELOR
OF SCIENCE IN CHEMISTRY.*Freshman Year.*

	Hours.		Hours.
Chemistry, 1, 2.....	5	French or German.....	3
English, 1 or 2.....	3	Graphics, 1	2
Mathematics, 3, 5, 7, or 6, 8, 10.	3		

Sophomore Year.

Chemistry, 3, 20.....	5	Mathematics, 9, 11, or 12, 14..	3
French or German	3	Physics, 1, 2.....	5

Junior Year.

Architecture, 1	1	Graphics, 2	2
Chemistry, 4, 21, 23.....	6	Geology, 1	2
French or German.....	3		

Senior Year.

Chemistry, 6, 24, 25, 27.....	11	Geology, 2	2
Economics or History.....	2	Electives	2

COMBINED COURSES.

The regular courses in the College of Arts and Sciences are so correlated with courses in the professional departments that the degree of Bachelor of Arts and the professional degree in Law may be obtained in six years, and in Medicine in seven years.

SCHEDULE OF COURSES IN THE REQUIRED SUBJECTS FOR THE FIRST TWO YEARS.

	MON.	TUES.	WED.	THUR.	FRI.	SAT.
9	Math. 3, 5, 7	Phil. 1	Math. 3, 5, 7	Phil. 1	Math. 3, 5, 7	Phil. 1
10	Eng. 4 Fr. 1 Math. 9, 11 Psychol. 1	Eng. 1 Physics 2 Span. 1	Eng. 4 Fr. 1 Math. 9, 11 Psychol. 1	Eng. 1 Physics 2 Span. 1	Eng. 4 Fr. 1 Math. 9, 11 Psychol. 1	Eng. 1 Span. 1
11	Fr. 3 Ger. 3	Ger. 1 Physics 2 Hist. 3	Fr. 3 Ger. 3	Ger. 1 Physics 2 Hist. 3	Fr. 3 Ger. 3	Ger. 1 Hist. 3
1:30	Econ. 1 Graphics 1 Latin 2 Physics 3	Biol. Lab. Chem. 2	Econ. 1 Graphics 1 Latin 2 Physics 3	Biol. Lab. Chem. 2	Econ. 1 Latin 2 Physics 3	
2:30	Graphics 1 Greek 1 Hist. 1	Biol. Lab. Chem. 2	Graphics 1 Greek 1 Hist. 1	Biol. Lab. Chem. 2	Greek 1 Hist. 1	
3:30	Graphics 1 Hist. 2 Latin 1	Biol. Lab. Chem. 2	Graphics 1 Hist. 2 Latin 1	Biol. Lab. Chem. 2	Hist. 2 Latin 1	
4:50	Econ. 2 Eng. 2 Math. 4 Physics 1	Biol. 1 Chem. 1 Eng. 3 French 4 German 2 Math. 6, 8, 10	Econ. 2 Eng. 2 Math. 4 Physics 1	Biol. 1 Chem. 1 Eng. 3 French 4 German 2 Math. 6, 8, 10	Econ. 2 Eng. 2 Physics 1	Biol. 1 Chem. 1 Eng. 3 French 4 German 2 Math. 6, 8, 10
5:40	Geology 2 Hist. 5 Math. 12, 14	French 2 Geology 1 German 4 Hist. 4 Math. 2	Hist. 5 Math. 12, 14	French 2 Geology 1 German 4 Hist. 4 Math. 2	Geology 2 Hist. 5 Math. 12, 14	French 2 German 4

PRIZES.

Only candidates for degrees may compete for these prizes.

STAUGHTON AND ELTON PRIZES.—The Staughton Prize, for excellence in the Latin Language and Literature, and the Elton Prize, for excel-

lence in the Greek Language and Literature, founded by the Rev. Romeo Elton, D.D., of Exeter, England, consist of two gold medals, annually awarded to the best scholar in each of these languages.

RUGGLES PRIZES.—The Ruggles Prizes, for excellence in Mathematics, founded by Professor William Ruggles, LL.D., consist of two gold medals, annually awarded upon examination to the best two scholars in Mathematics.

MUNROE PRIZE.—Professor Munroe offers a gold medal to that student from any Washington high school or the Manual Training School who shall attain the highest mark in Chemistry among those passing the entrance examinations, and shall remain in regular attendance for one year.

CLASS OF '96 JAMES MACBRIDE STERRETT, JR., MEMORIAL MEDAL.—This prize is annually awarded to that student taking Course 1 in Physics who obtains the highest average in a special examination on a given subject and in the writing of an essay on an assigned topic.

DAVIS PRIZES.—The Davis Prizes, for excellence in Elocution, founded by the Hon. Isaac Davis, LL.D., of Massachusetts, consist of three gold medals, annually awarded to the successful competitors in a public contest. Only members of the Senior Class are eligible to compete for these prizes.

DAUGHTERS OF THE AMERICAN REVOLUTION PRIZES.—These prizes, founded by the Daughters of the American Revolution of the District of Columbia, consist of two gold medals, awarded annually to the two students in the graduating class who, having maintained a high standing in the regular courses in Mediæval, Modern European, English, and American History during three years, shall produce the best essays upon an assigned topic of American history.

THE THOMAS F. WALSH PRIZE.—This prize established by Thomas F. Walsh, Esq., of Colorado, and based upon the income of one thousand dollars, consists of a gold medal awarded annually to that student of the graduating class, who having maintained a high standard in the regular classes of Mediæval, Modern European, English and American History, shall produce the best essay upon a designated period of the History of Ireland.

E. K. CUTTER PRIZE.—The E. K. Cutter Prize in English was founded by the late Marion Kendall Cutter. The endowment is a fund of one thousand dollars, the income of which is given annually as a prize "for excellence in the study of English." The prize will be awarded to that member of the graduating class whose record in English, combined with general excellence, shows most marked aptitude and attainment in English studies.

WILLIE E. FITCH PRIZE.—The Willie E. Fitch Prize, for highest excellence in all branches of Chemistry, founded by James E. Fitch, Esq.,

in memory of his son, consists of fifty dollars, which is awarded annually for the best examinations in Chemistry.

OLD AND MIDDLE ENGLISH PRIZE.—This is a prize of twenty-five dollars awarded to the student showing the greatest proficiency in English, 28.

THE GARDINER G. HUBBARD MEMORIAL PRIZE.—This is a prize in American History established by Mrs. Gertrude M. Hubbard, in memory of her husband, the late Gardiner G. Hubbard. The endowment is a fund of one thousand dollars, the income from which is to be given annually to that student of the graduating class, who has during four years maintained a high standing in the classes of American History, and who has produced the best essays upon subjects based upon a study of some assigned period of American history.

THE FUNK AND WAGNALLS STANDARD DICTIONARY PRIZE.—The Funk and Wagnalls Company offers an unabridged morocco-bound copy of the latest edition of the Standard Dictionary of the English Language, to that member of the Freshman Class who passes the best examination in English Rhetoric. A special examination for this prize is given in May. The examination covers the work in English Rhetoric for the entire year.

COLONIAL HISTORY PRIZE.—The Society of the Colonial Dames of America, Chapter III, offers annually a gold medal for excellence in American Colonial History. This prize will be awarded by the Professor of History for general excellence in this subject as shown by class standing, by special essays, and by such other tests as shall be prescribed.

PRIZE AWARDS 1907-08.

STAUGHTON PRIZE......Catharine Agatha McAvoy

ELTON PRIZECatharine Agatha McAvoy

RUGGLES PRIZEBertha Birtwell

MUNROE PRIZE......Prescott Stearns Tucker

DAVIS PRIZES:

First PrizeJustin Frank Seiler

Second PrizeWilliam Cabell Van Vleck

Third PrizeEdward Percy Gates

DAUGHTERS OF THE AMERICAN REVOLUTION PRIZES:

Edward Percy Gates

Pearl Ketcham Merritt

THOMAS F. WALSH PRIZE......William Cabell Van Vleck

Honorable mentionPearl Ketcham Merritt

E. K. CUTTER PRIZE......Lulu Elizabeth Conner

WILLIE E. FITCH PRIZE......Sidney Forsythe Sherwood

FRENCH COMPOSITION PRIZES:

First Prize John Howard Dellinger
 Second Prize Ernst Otto Schreiber, Jr.

GARDINER G. HUBBARD MEMORIAL PRIZE..... William Cabell Van Vleck
 Honorable mention Edward Percy Gates

PRIZE AWARDS 1908-09.

STAUGHTON PRIZE..... Vera Elsie Adams
 ELTON PRIZE..... Vera Elsie Adams
 MUNROE PRIZE..... Lenore Heald
 CLASS OF '96 JAMES MACBRIDE STERRETT, JR., MEMORIAL
 PRIZE Anna Melrose Browning

DAVIS PRIZES:

First Prize James William Berry
 Second Prize Joseph Ryland Curl
 Third Prize..... Tench Tilghman Marye

DAUGHTERS OF THE AMERICAN REVOLUTION PRIZES:

May Thacher Cooke
 Charlotte Raynsford Farrington

THOMAS F. WALSH PRIZE..... Howard G. England
 E. K. CUTTER PRIZE..... James William Berry
 WILLIE E. FITCH PRIZE..... Aubrey Vail Fuller
 GARDINER G. HUBBARD MEMORIAL PRIZE. Charlotte Raynsford Farrington
 FUNK AND WAGNALLS STANDARD DICTIONARY PRIZE:

Jeanette Geschickter

COLONIAL HISTORY PRIZE OF THE SOCIETY OF THE COLONIAL DAMES

OF AMERICA..... Anne Lee Ettenger

SCHOLARSHIPS.

Applications for scholarships should be filed with the Dean not later than September fifteenth. All scholarships except the Kendall Scholarship and the University Scholarships are awarded for one year only, but they may be renewed. Any student holding a scholarship who fails to obtain a general average of 85 per cent on the work of any term or whose deportment is unsatisfactory will be reported to the President's Council, and in the absence of extenuating circumstances the scholarship will be revoked.

KENDALL SCHOLARSHIP.—The Kendall Scholarship, founded by the late Hon. Amos Kendall, is annually conferred on that student from any of the Washington High Schools or from the Manual Training School who attains the highest average in the June entrance examina-

tions. This scholarship continues throughout the undergraduate course, and the student holding it pays only the matriculation, library, laboratory and graduation fees.

UNIVERSITY SCHOLARSHIPS.—The University offers also six scholarships, each continuing throughout the undergraduate course, to be awarded annually to members of the graduating classes of the high schools of Washington and of the Manual Training School. The scholarships are divided, so far as the general averages will permit, among the several schools in proportion to the number of students in attendance upon each. Three scholarships are offered to young men and three to young women. No scholarship is awarded to a candidate whose examination average is below 80 per cent. Candidates for these scholarships take the June entrance examinations for the undergraduate course leading to the degree of Bachelor of Arts or the degree of Bachelor of Science, as they shall elect, and on the results of these examinations the scholarships are assigned. Holders of these scholarships are expected to pursue a regular course in the Department of Arts and Sciences leading to a degree. Such students pay only the matriculation, library, laboratory, and graduation fees.

DAVIS SCHOLARSHIP.—This is the income of a fund of one thousand dollars given to the University in October, 1869, by Hon. Isaac Davis, of Massachusetts.

MARY LOWELL STONE SCHOLARSHIP.—This scholarship was founded by a woman in memory of a woman student of science. It consists of a fund of two thousand dollars, the income from which is to be paid to needy women students of science in the University; it will be awarded by the President's Council.

MARIA M. CARTER SCHOLARSHIP.—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Maria M. Carter.

FARNHAM SCHOLARSHIP.—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Robert Farnham.

MINISTERIAL SCHOLARSHIPS.—Students in regular courses preparing for the Christian Ministry, and not yet ordained, are exempt from tuition charges. Such students pay the matriculation, library, laboratory, and graduation fees.

Students in regular courses who are children of clergymen financially dependent wholly or in part upon their parents are exempt from one-half of all tuition charges. Such students pay the matriculation, library, laboratory, and graduation fees.

DAVIS PRIZE SPEAKING.

The Davis Prize Speaking is held in University Hall on the Tuesday after the Easter holidays. The Davis Prizes were founded by Hon.

Isaac Davis, of Massachusetts, in 1847. The original endowment was five hundred dollars, "proceeds of which will afford three premiums, in cash or gold medals, of the value of \$5, of \$10, and of \$15 annually—these premiums or prizes to be distributed annually to such members of the Senior Class as shall have made the greatest progress in elocution since their connection with the College."

The award of these three prizes is determined by a public speaking contest, in which the participants deliver original orations. Senior students wishing to enter the competition should report to the Dean of the College not later than five weeks before the contest, and submit their orations not later than three weeks before the contest. The prizes are awarded by a committee consisting of three members, selected by the Executive Faculty of the College.

ENOSINIAN SOCIETY.

The Enosinian Society, a literary association formed by the students of Columbian College, to which any University student is eligible, meets regularly for the purpose of improvement in debate and composition.

This society had its beginning March 6, 1822, during the first session of Columbian College, when a number of students held a meeting "for the purpose of establishing a debating society." Two Enosinian prizes are given annually and are publicly presented at the Commencement. They are the following:

DEBATERS' PRIZE.—A gold medal given by the Society for proficiency in debate. This prize was awarded in 1908 to Edward Percy Gates. Honorable mention to William C. Van Vleck.

GORE PRIZE IN PARLIAMENTARY LAW.—A gold medal given by Prof. James Howard Gore for proficiency in parliamentary law. This prize was awarded in 1908 to William C. Van Vleck.

WOMAN'S BUILDING.

A Woman's Building was opened by the University in September, 1907. This is situated near the University Building, at 1538 I street. The lower floors contain lecture rooms, recitation, committee, and dining-rooms. The upper floors are a college dormitory for women, and college girls may obtain board and rooms at reasonable rates. The Woman's Building is the social centre for the young women of the College.

DEAN OF WOMEN.

The Dean of Women is an assistant to the Deans in the Department of Arts and Sciences, having general oversight of the women students. She will assist these students to find desirable boarding places and asso-

ciations in the city. She will advise them in University matters excepting those pertaining to the educational and general administrative functions of the Deans. She may be consulted in her office in the University Building at all times and she will exercise supervision over the social activities of the women students.

LUTHER RICE MISSION STUDIES.

Luther Rice founded Columbian College in 1821 with a missionary motive and a purpose to "diffuse knowledge both literary and religious through these United States." In remembrance of this motive and in coöperation with the various interdenominational missionary movements, the College instituted during the winter of 1907-08 four University Extension Courses in the study of Christian missions. These courses were planned to help leaders of classes in the churches and students of missions. They are all without fee and are open to men and women.

The following courses were given in 1908-09:

"The Why and How of Foreign Missions," conducted by Professor SMITH.

"The Moslem World," conducted by Assistant Professor MANNING.

"The Nearer and Farther East," conducted by Miss ELLIS.

"The Frontier," conducted by Professor WILBUR.

THE CHRISTIAN ASSOCIATION.

The student movement in Association work is represented by the Young Men's Christian Association of The George Washington University, which was organized in the fall of 1905. The Association plans and conducts religious work among the men of the University. The Association calendar includes Bible study clubs, a weekly chapel service, and occasional men's meetings.

Similar lines of religious work are conducted among the women students by the Young Women's Christian Association of Columbian College.

THE COLLEGE CHAPEL.

The College Chapel is held in the University Building on Monday, Tuesday, Wednesday, and Thursday, at 12 o'clock, throughout the academic year. These chapel services are conducted by the Faculty. On Friday at 12 o'clock there are two services, conducted respectively by the Young Men's Christian Association and the Young Women's Christian Association.

The Dean of the College will confer with students as they may desire on questions concerning their welfare and will coöperate with them in all ways to make the college life one of personal helpfulness.

COLLEGE OF ENGINEERING AND MECHANIC ARTS.

The session of 1909-1910 begins Wednesday, September 29, 1909.

Two houses, 1528 and 1530 I street, have been remodeled for use of the College of Engineering, and contain class-rooms, drawing-rooms, library and reading-room, cement laboratory and offices of members of the Faculty.

The Chemical, Physical, Electrical and Mechanical laboratories are in the main building of the University, corner of Fifteenth and H streets, N. W.

The office of the Dean is at 1528 I street.

ADMISSION.

Every applicant for admission is required to present a testimonial of good character, and also a certificate of standing and regular dismissal from the school or college which he has attended or from the tutor with whom he has studied.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required subjects. Certificates, in lieu of any or all examinations, will be accepted from schools whose work is attested by well-prepared students admitted to the University in previous years, and from schools desiring coöperation with the University, that present evidence of affording adequate preparation in the required subjects. The Secretary of the University will, on application, furnish certificate blanks to the principals of such accredited schools.

The certificate of the College Entrance Examination Board will be accepted in so far as the subjects specified meet the requirements for admission.

The certificate of the Washington high schools covering all the requirements for admission admits students without examination to the courses of the Freshman year.

The certificates of all schools accredited to the University will be accepted in so far as they meet the requirements for admission.

The general requirement for admission is a four-year high school course, or its equivalent, consisting of five recitations per week in four or more topics. The high school studies which may be presented in satisfaction of the requirements of admission are given on pp. 33-41 of this catalogue.

Candidates for admission to the Freshman Class in the College of Engineering are required to present fifteen units for admission, distributed as follows:

	Units.
English	3
French or German.....	4
Plane and Solid Geometry.....	1½
Elementary and Advanced Algebra.....	1½
Plane Trigonometry	½
Chemistry	1
Physics	1
Electives	2½
	<hr/>
	15

NOTE.—The modern language requirement may be satisfied by presenting four units in one language, or two units in French and two units in German. Students who present four units in one language will study the other language two years in College. Students who present two units in French and two units in German will study each language one year in College.

ADMISSION TO ADVANCED STANDING.

Candidates for admission to advanced classes in any department are examined in all indispensable preliminary studies.

Due credit is given for properly certified courses of study pursued in other colleges and universities.

ADMISSION TO SPECIAL COURSES.

All the courses of instruction are open to students of suitable age and attainments who wish, without reference to any degree, to pursue special studies. Candidates must show that they are familiar with the subjects preliminary to the studies which they wish to pursue.

COURSES FOR A DEGREE.

Three courses of study are offered:

I. CIVIL ENGINEERING.

II. ELECTRICAL ENGINEERING.

III. MECHANICAL ENGINEERING.

These courses occupy four years each, and lead to the degree of Bachelor of Science in Civil Engineering, in Electrical Engineering, and in Mechanical Engineering, respectively. Graduate courses of one year under the Faculty of Graduate Studies of the George Washington

University are open to those who receive the above degrees, and lead, respectively, to the degrees of Civil Engineer, Electrical Engineer, and Mechanical Engineer.

The courses in engineering are planned to give the student a thorough understanding of the theory underlying engineering practice, and such a practical knowledge of the instruments and methods of his particular profession as will enable him to apply the theory properly. In all the courses a thorough training in mathematics, pure and applied, and in drawing and descriptive geometry is required as the basis of the analytical and graphical study of engineering topics. Much stress is laid on the work in the drawing-room and laboratory. The work is planned to give him a thorough knowledge of principles upon which he may build, and by which he may be able to solve the new problems he meets in practice.

The work of the first year is the same for all students. It is taken up partly with general studies which have both an educational and a cultural value, and partly with work in mathematics and drawing which lays the foundations for the subsequent courses. In each of the other years there are studies taken in common by all engineering students; these studies including courses in English, in French and German, in pure and applied mathematics, in drawing and descriptive geometry, in chemistry and in physics. The requirement in French and German is intended to give the student an accurate reading knowledge of these languages, with particular reference to scientific literature.

Beginning with the Sophomore year, the Civil Engineering student enters upon his technical studies, continuing at the same time a number of topics of a more general character, and in the Junior and Senior years the work becomes yet more specialized. He begins with a general course in surveying and follows this with courses in railroad and highway location and construction. Theoretical hydraulics and hydraulic engineering receive careful and detailed treatment and much stress is laid on sanitary work, both in its theory and applications. A preliminary course in engineering materials and simple constructions in the Sophomore year is followed in later years by extended courses in mechanics of materials, and in the theory and design of structures in wood, steel, and masonry, in which are applied the knowledge gained in the courses in mechanics and graphic statics.

The courses for Electrical and Mechanical Engineering students are the same during the Sophomore year, and beside the general studies required of all engineering students include courses in advanced drawing and design and in kinematics of machinery. Shopwork begins in this year and continues until the end of the course for both classes of students, although the Electrical students give less time to it than do

the Mechanical students. The purpose of the work is not primarily to give manual skill, but to give such an understanding of tools and processes as will be of assistance in designing and in superintending. In the Junior year Electrical and Mechanical students take in common courses in steam engineering and on boilers and power plants.

The Electrical students begin their special work in electricity in the Junior year. Theoretical electricity is first studied, and is followed by engineering electricity, and by courses on direct current machinery. In the laboratory, experimental work in exact measurements is followed by the study of the dynamo. In the Senior year alternating current machinery is studied, both theoretically and practically; and courses on the applications of electricity and on light and power distribution are taken. In the drawing-room are studied related problems in design. Many hours are given to work in the electrical and general engineering laboratories.

The Mechanical Engineering students, in addition to the courses which they take in common with the electrical students, have courses in engine design, including steam and gas engines; in hydraulics and hydraulic machinery; and a course in electrical engineering, considering electrical machinery from the standpoint of one who is to use it rather than to design it.

The engineering courses are partly lecture and partly laboratory and drawing-room courses, the plan being to give the theory in the classroom, to illustrate the theory in the laboratory, and to have the student apply the theory, from given data, in the drawing-room.

REQUIREMENTS FOR A DEGREE.

The arrangement of the topics in each of the regular courses for a degree is shown below. The numbers following the names of subjects refer to the courses as given in the list of University Subjects on pages 76-117, to which reference should be made for more complete description.

COMMON TO ALL COURSES.

Freshman Year.

Chemistry, 1, 7.

General Chemistry and Qualitative Analysis.

English, 1 or 2.

Rhetoric.

French or German.

Graphics, 1.

Mechanical and Freehand Drawing.

Mathematics, 9, 11 or 12, 14.

Trigonometry; Analytic Geometry.

CIVIL ENGINEERING COURSE.

Sophomore Year.

Civil Engineering, 1, 4.

Surveying; Materials of Construction.

French or German.

Graphics, 8, 10.

Descriptive Geometry; Topographic Drawing.

Mathematics, 20 or 21.

Calculus.

Physics, 1, 2.

General Physics; Laboratory Physics.

Junior Year.

Applied Mathematics, 20, 21, 22.

Mechanics; Hydraulics; Mechanics of Materials.

Civil Engineering, 2, 3, 8, 22.

Railroad Engineering; Highway Engineering; Practical Astronomy; Theory of Structures.

Electrical Engineering, 6.

Industrial Engineering.

Geology, 2.

Senior Year.

Chemistry, 6.

Metallurgy.

Civil Engineering, 20, 21, 23, 24.

Masonry; Hydraulic Engineering; Theory of Structures; Sanitary Engineering.

Contracts and Business Law.

Mechanical Engineering, 12.

Steam Engineering.

ELECTRICAL ENGINEERING COURSE.

Sophomore Year.

French or German.

Graphics, 2, 8.

Advanced Mechanical Drawing; Descriptive Geometry.

Mathematics, 20 or 21.

Calculus.

Mechanical Engineering, 1, 4.

Mechanism; Shopwork.

Physics, 1, 2.

General Physics; Laboratory Physics.

Junior Year.

Applied Mathematics, 20, 21, 22.

Mechanics; Hydraulics; Mechanics of Materials.

Chemistry, 6.

Metallurgy.

Electrical Engineering, 1, 2, 3, 4, 5.

Elementary Electricity; Direct Current Machinery;

Electrical Engineering; Electrical Measurements;

Electrical Engineering Laboratory.

Mechanical Engineering, 5, 20.

Metal-work; Steam Engineering.

Senior Year.

Civil Engineering, 5, 6.

Surveying Instruments; Foundations.

Contracts and Business Law.

Electrical Engineering, 8, 21, 22, 23, 24, 26, 27.

Electrical Designs; Alternating Currents; Electrical Distri-

bution; Electrical Applications; Electrical Engineering

Laboratory; Electric Lighting; Electric Railways.

Mechanical Engineering, 10, 23.

Engineering Laboratory; Hydraulic Machinery.

MECHANICAL ENGINEERING COURSE.

Sophomore Year.

French or German.

Graphics, 2, 8.

Advanced Mechanical Drawing; Descriptive Geometry.

Mathematics, 20 or 21.

Calculus.

Mechanical Engineering, 1, 4.

Mechanism; Shopwork.

Physics, 1, 2.

General Physics; Laboratory Physics.

Junior Year.

Applied Mathematics, 20, 21, 22.

Mechanics; Hydraulics; Mechanics of Materials.

Civil Engineering, 22.

Theory of Structures.

Mechanical Engineering, 5, 6, 9, 20.

Metal-work; Engineering Drawing; Engineering Laboratory; Steam Engineering.

Senior Year.

Chemistry, 6.

Metallurgy.

Civil Engineering, 5, 6.

Surveying Instruments; Foundations.

Contracts and Business Law.

Electrical Engineering, 7.

Dynamos and Motors.

Mechanical Engineering, 7, 10, 22, 23, 25, 28.

Machine Design; Engineering Laboratory; Internal Combustion Motors; Hydraulic Machinery; Compression and Refrigeration Machinery; Industrial Management.

PRIZES.

Only candidates for degrees may compete for these prizes.

RUGGLES PRIZES.—The Ruggles Prizes, for excellence in Mathematics, founded by Professor William Ruggles, LL.D., consist of two gold medals, annually awarded upon examination to the best two scholars in Mathematics.

MUNROE PRIZE.—Professor Munroe offers a gold medal to that student from any Washington high school or the Manual Training School who shall attain the highest mark in Chemistry among those passing the entrance examinations, and shall remain in regular attendance for one year.

CLASS OF '96 JAMES MACBRIDE STERRETT, JR., MEMORIAL MEDAL.—This prize is annually awarded to that student taking Course 1 in Physics who obtains the highest average in a special examination on a given subject and in the writing of an essay on an assigned topic.

DAVIS PRIZES.—The Davis Prizes, for excellence in Elocution, founded by the Hon. Isaac Davis, LL.D., of Massachusetts, consist of three gold medals, annually awarded to the successful competitors in a public contest. Members of the Senior Class are eligible to compete for these prizes.

SCHMIDT PRIZES.—Mr. Fred. A. Schmidt offers a prize to the student who attains the highest standing in Descriptive Geometry, Trigonometry, and Analytic Geometry.

MUTH PRIZE.—Geo. F. Muth & Co. offer a set of drawing instruments to the student taking Advanced Mechanical Drawing who makes the highest average record in that subject and in the previous year's Mechanical Drawing.

PRIZE AWARDS, 1907-08.

CLASS OF '96 JAMES MACBRIDE STERRETT, JR., MEMORIAL PRIZE:

J. Ralph Fehr

THE FRED A. SCHMIDT PRIZE.....Irving Randolph Saum

PRIZE AWARDS, 1908-09.

THE FRED A. SCHMIDT PRIZE.....Henry B. Myers

THE MUTH PRIZE.....William M. Leonard

SCHOLARSHIPS.

Applications for scholarships should be filed with the Dean not later than September fifteenth. All scholarships except the Kendall Scholarship and the University Scholarship are awarded for one year only, but they may be renewed. Any student holding a scholarship who fails to obtain a general average of 85 per cent on the work of any term or whose deportment is unsatisfactory will be reported to the President's Council, and in the absence of extenuating circumstances the scholarships will be revoked.

The Kendall Scholarship and the University Scholarships are open to students in the College of Engineering. Detailed statements in regard to these scholarships are given on pages 49-50.

HENRY HARDING CARTER SCHOLARSHIPS.—These scholarships, founded by Mrs. Maria M. Carter in memory of her husband, Henry Harding Carter, consist of four scholarships of the annual value of fifty dollars each, and may be awarded to deserving students who are preparing for the civil engineering profession.

ADMIRAL POWELL SCHOLARSHIPS.—The Admiral Powell Scholarships were founded by the late Admiral Powell, U. S. Navy. The income from this endowment is for the "free education of such young men as may desire to take advantage of the said endowment by way of their preparation for entrance into the Naval Academy at Annapolis, Maryland or such as may fit them to become mates or masters in the Merchant Marine Service of the United States," and of "such apprentices as, having filled their time in the great steam manufactory establishments of the country, may apply for appointment from civil life in the Steam Engineer Department of the United States Navy." The number of scholarships awarded each year will be determined by the income from the endowment. Each scholarship will entitle the beneficiary to free tuition for one year. Such special courses of study are offered to each student as will give him the instruction needed to accomplish the purpose for which he is awarded the scholarship.

These scholarships are especially applicable to those who intend to come up for examination as warrant officers in the Engineer Depart-

ment of the Navy, or to those who desire to fit for responsible positions in the mercantile marine.

The subjects to be taken by a student will vary according to his preparation and according to the purpose for which he has been awarded the scholarship, but a year's work can be selected from the following topics:

	Hours.
Navigation and Nautical Astronomy.....	6
Algebra and Geometry.....	3
Trigonometry	1½
Mechanical and Machine Drawing.....	4
Meteorology	2
English	3
French	3
German	3
Spanish	3
International Law	1
Commercial Geography	1
Admiralty Law	½
Boilers and Power Plants.....	3
Measurement of Power.....	3
Dynamo theory	2
Dynamo testing	3

COLLEGE OF THE POLITICAL SCIENCES.

GENERAL STATEMENT.

The College of the Political Sciences offers systematic and scientific instruction in the various branches of the political sciences.

To undergraduate students it gives a broad, general education in the political sciences and in social, political, and economic history as a foundation for specialization in certain of the learned professions.

By means of its graduate courses, it gives a comprehensive and highly-specialized training in the political sciences, including government and administration, international law and diplomacy, economics, finance, and history, based upon the constant observation of facts at the capital of the nation and the critical appreciation and comparative study of political and social institutions.

This education is intended to give a training that will fit certain students for consular and diplomatic positions and for the public service of the United States, while imparting that general culture and equipment necessary for efficient citizenship and the intelligent grasp of public questions.

In Washington are collected the official records of the nation's history. Here are accumulated vast stores of information concerning the condition of the country and the problems confronting us as a people. As the capital of the nation, Washington furnishes the best, and in many instances the only, opportunity for studying the government in actual operation. Here is the National Congress, engaged in the work of practical legislation. Here sits the Supreme Court which gives to that legislation authoritative interpretation. Here are the great Executive Departments carrying on the business of government and working out the problems of administration. These together with the government of the District of Columbia are constant object lessons in political science. Here is the largest resident diplomatic body to be found anywhere in the world. Here are gathered representatives of the nation and of the press, creating a center of activity in all that appertains to the branches included within the scope of the College. Such an atmosphere for the student of the political sciences can be found nowhere else.

Among the additional advantages in these branches may be mentioned the Library of Congress, which contains 1,400,000 volumes and over 300,000 maps, manuscripts, etc., accessible to the students of the University; the Library of the Smithsonian Institution, enriched by its exchanges with all the countries of the civilized world; the Library of the State Department, containing more than 80,000 volumes, including nearly all the important publications relating to international law,

diplomacy, and political history; the Public Library of the District of Columbia, with 90,000 volumes; the United States Bureau of Education, rich in statistical material and foreign exchanges; the excellent working libraries of the Department of Commerce and Labor, the Bureau of Statistics, the Bureau of Trade Relations, the Bureau of American Republics, the Interstate Commerce Commission, the Census Bureau, and the Department of Agriculture.

Of these special facilities, as well as those which Washington enjoys as a center of general culture, the College of the Political Sciences is planned to take a thorough and systematic advantage. On the Faculty are not only men who are scholars and teachers, but also men whose successful experience in the public service and in the other branches they teach gives their instruction the greatest practical value.

ADMISSION.

The requirement for admission to the College of the Political Sciences is the completion of two years, or its equivalent (fifteen hours per week per year), of satisfactory undergraduate work in any college or university whose entrance requirement is a four-year high school course, or its equivalent, amounting to fifteen "units." (See requirements for admission to the College of Arts and Sciences.)

Students who have completed more than two years of work in other colleges or universities of approved rank and who have received credit for that work may be admitted to advanced standing, provided their work has been of such character as to be acceptable in lieu of courses in the College of the Political Sciences.

Students who wish to pursue work leading to a graduate degree must present an acceptable Bachelor of Arts degree, or its equivalent, granted by a college or university of approved standing.

The session 1909-10 begins September 29, 1909. The academic year is divided into two parts—the first half year, beginning September 29, and the second half year, beginning January 31. Since many courses commence with the beginning of the second half year, a student may usually enter the College at this time without being necessarily delayed in the completion of the work requisite for graduation. Students who enter the College at the opening of the second half year's work may be graduated at the annual Winter Convocation of the University on February 22.

ADMISSION TO SPECIAL COURSES.

All courses of instruction are open to persons of maturity and suitable attainments who wish to pursue special studies without reference to a degree. Such persons are designated as special students. Upon successfully passing the examinations in the courses pursued, such stu-

dents will receive certificates for work completed. But no one can be admitted to any course without satisfying the professor in charge that he has had previous training sufficient to carry on the work of the course with profit.

THE DEGREE OF BACHELOR OF ARTS.

The only undergraduate degree conferred by the University for work completed in the College of Political Sciences is the degree of Bachelor of Arts (A.B.) To be recommended for this degree the student (1) must have satisfied the entrance requirements, (2) must have been registered for at least one academic year, and (3) must have completed a total of sixty hours of class-room work (fifteen hours per week for four years). Thirty hours of this work may be taken in this College.

The Bachelor of Arts degree is granted by the University upon the recommendation of the Faculty of Undergraduate Studies. No student may receive the degree who has not been in residence at this University at least one academic year.

HIGHER DEGREES.

The higher degrees conferred by the University for work completed in the College of the Political Sciences are Master of Arts (A.M.), Master of Diplomacy (M.Dip.), and Doctor of Philosophy (Ph.D.). Candidates for any one of these degrees must possess a Bachelor of Arts degree, or its equivalent, granted by a college or university of acceptable rank.

Candidates for admission to courses for higher degrees must present the diplomas they hold, or certificates that they have received such diplomas, to the Secretary of the University, and obtain from him application blanks. When properly filled and signed, these applications are to be submitted to the Dean of the Faculty of Graduate Studies, together with catalogues of the institutions from which they hold their degrees and certificates of their course of study at such institutions. All such applications should be accompanied by testimonials as to character and scholarship.

Candidates for the degree of Master of Diplomacy (1) must possess a knowledge of two modern languages other than English, (2) must complete twenty-four hours (twelve hours per week for two years) of class-room work, and (3) must prepare a satisfactory dissertation showing original research and investigation. But applicants for this degree who, in the attainment of their Bachelor of Arts degree, have completed

the equivalent of twelve acceptable units in economics, political science, and public law may be credited with not more than twelve units toward the degree of Master of Diplomacy. Candidates for the Master of Diplomacy degree pursue their work under the general direction of the Dean of the College of Political Sciences. This degree is awarded by the University upon the recommendation of the Faculty of the College of Political Sciences.

For an outline of the requirements for the degree of Master of Arts and Doctor of Philosophy and for the regulations in regard to dissertations, the candidate is referred to page 26.

Students who become candidates for the Master of Arts or the Doctor of Philosophy degree pursue their work under the general direction of the Dean of the Faculty of Graduate Studies. These degrees are awarded by the University upon the recommendation of the Faculty of Graduate Studies. No student may receive any higher degree who has not been in residence in this University at least one academic year.

LIBRARY.

The library of the College of the Political Sciences contains several thousand volumes carefully selected with special reference to library work in connection with the courses of instruction offered. It affords a practical work-room for the use and convenience of students and is open during the day and evening. The main library of the University and the law library are in adjacent buildings. The Library of Congress, the Carnegie Library, and the Library of the Department of State are easily accessible for extended research work and special investigation.

COURSES OF STUDY.

The courses offered in this College are grouped in five sections: (1) Political Science, (2) International Law and Diplomacy, (3) Economics and Finance, (4) Commerce and Transportation, (5) History. The courses in each section are classified in two divisions: (1) for undergraduates and graduates, (2) for graduates. The first division includes those courses which, while primarily for undergraduates, may nevertheless be pursued with profit by graduate students who have not had equivalent courses in their undergraduate work. The second division embraces courses which are offered primarily for graduate students, although undergraduates specially fitted to pursue the work may occasionally be admitted to such courses with the consent of the Dean and of the professor in charge.

Courses in this College are open to students in Columbian College and the Department of Law with the consent of their respective Deans. Students in the College of the Political Sciences may, likewise, with the consent of the Dean of the College, elect courses in Columbian College and the Department of Law.

Lectures begin at 8.00 a. m. and close at 6.30 p. m.

TEACHERS COLLEGE.

The session of 1909-10 begins Wednesday, September 29, 1909.

The Education Building, containing lecture and seminar rooms, the Psychological Laboratory, and the Department Library, is situated at 1534 I street, N. W.

The office of the dean is in this building.

GENERAL STATEMENT.

The purpose of the Teachers College is to provide (a) collegiate training for teachers, (b) instruction in education as a department of science.

While research in the field of educational science, and the provision of courses which may be taken mainly for their culture value, are important features of the work of any university department of education, the principal aim of the Teachers College is the practical and professional one of training teachers. In this large field, the Teachers College will restrict itself for the present mainly to the preparation of teachers for the higher grades of instruction and administration. The many excellent normal schools and training colleges are preparing teachers for efficient service in the primary and grade schools; but the need of the broad and substantial training of a college course as a preparation for high school teaching, and for responsible administrative positions, is now very generally admitted. Up to the present time, it has too often happened that the college graduate who wishes to teach has been without any knowledge of the theory and practice of his vocation. The George Washington University, in common with many leading institutions, has endeavored to remedy this defect in the college training of the teacher by establishing a department for the systematic study of education in all its theoretical and practical aspects.

The aims of the Teachers College may, accordingly, be summarized as follows:

- (a) To promote the knowledge of educational science.
- (b) To fit students for the higher positions in the public school service.
- (c) To secure to teaching the rights and prerogatives of a profession.
- (d) To aid in raising the standards of educational practice, and so to increase the efficiency of public education.

ORGANIZATION.

With a view to combining to the best advantage a general college education with adequate professional training for teaching, the work of the Teachers College rests upon a preparatory course of two years duration in the College of Arts and Sciences. The prescribed studies of this

course, given below, are stated as "Group IV" (see page 44) in the announcement of the curricula of the first and second years. The two years of professional study in the Teachers College consists of a minimum of ten units of required technical courses in education and twenty units of electives, the major part of which should be devoted to the subjects which the student wishes to teach.

Inasmuch as a large number of teachers in service are without college degrees, and a still larger number desire to supplement their professional training by taking special courses, the courses of instruction have been arranged to meet the needs both of undergraduate students and of teachers in service. The required courses constituting the prescribed work in education are given both in the morning and in the late afternoon hours, and are, therefore, easily accessible to both students and teachers from the schools. The hours are also convenient for persons employed in the Departments of Government. The completion of the curriculum of Group IV in the College of Arts and Sciences, and the prescribed and elective courses in the Teachers College, is recognized by the granting of a Bachelor of Arts degree and a Teacher's Diploma.

Opportunity is also offered to graduate students to pursue a major or minor in Education, leading to the granting of a Teacher's Diploma in conjunction with a Master's or a Doctor's degree. In this connection attention may be called to the exceptional facilities existing in Washington for graduate study particularly in the history of education in the United States. The extensive collections of the Congressional Library and the library and archives of the United States Bureau of Education furnish unrivalled opportunities in this department.

ADMISSION.

Applicants for admission as regular students, *i. e.*, as candidates for a degree, must present certificates showing that they have completed the first two years of the prescribed curriculum in the College of Arts and Sciences, or an equivalent course in some other institution. Teachers in service, however, and graduates of Normal Schools, who are entitled to advanced standing, may be registered in Teachers College, and conditioned in the prescribed studies in which they may be deficient, until they shall have completed those courses. But persons desirous of taking one or more of the professional courses, without becoming candidates for a degree, may be admitted as special students on the presentation of satisfactory evidence that they are qualified to pursue the work to advantage. Students who have begun their college course in another Group than that entitling them to admission to Teachers College may transfer their registration to Group IV, provided that they complete all the prescribed work of the latter Group.

ADMISSION TO ADVANCED STANDING.

Students who have pursued courses of study in other colleges or universities of approved rank will receive advanced credit for such work on the presentation of certificates.

Graduates of approved Normal Schools, Training Colleges, or Technical Schools, and teachers of experience who have studied privately, will be admitted to such advanced standing as the courses they have pursued warrant.

THE TEACHERS COURSE.

The full college course for the training of teachers comprises therefore the following educational divisions, the first two made up of prescribed studies and of qualified electives, the third of free electives:

(a) A foundation of 22-24 hours of general culture studies, pursued in the College of Arts and Sciences, and prescribed in accordance with the view that a teacher's preparatory training should omit no one of the principal elements of culture, supplemented by 6 to 8 hours elective among the same subjects, in order to make the curriculum adaptable to the varying needs of individuals.

(b) A minimum of ten hours of professional training courses.

(c) Twenty free elective hours of special information courses and further training courses.

In recognition of the professional training and the high number of prescribed hours of study, graduates of the Teachers College will receive, in addition to the Bachelor of Arts degree, a Teacher's Diploma. Both are conferred by the University.

An "hour" of study represents one hour of recitation or lecture work per week for one academic year, or its equivalent.

GRADUATION.

To be recommended for a Bachelor of Arts degree and a Teacher's Diploma, the student must complete courses of study aggregating at least sixty hours. Thirty-two or thirty-four of these hours are prescribed studies, and the remainder are electives. The prescribed studies are the following:

(a) In general culture subjects:

	Hours.
English	3
Mathematics or Science.....	3
French, German, Latin or Greek.....	3
History	3
Psychology	3
Philosophy, Political Economy or History.....	2 or 3
Languages or Sciences	5 or 6

(b) In professional subjects:	Hours.
History of Education	2
Principles of Education }	3
Educational Psychology }	
Child Study, or	2
Principles of Secondary Education }	
Classroom Management and Supervision, or }	1
School Administration }	
Observation and Practice Teaching	2

(For further definition of these requirements, see the introductory note under Courses of Instruction.)

The electives should be chosen with direct reference to the subjects which the student wishes to teach.

THE TEACHER'S DIPLOMA.

The Teacher's Diploma is granted in connection with the Bachelor of Arts degree, upon the fulfilment of the following conditions: *a*. The student must have satisfactorily completed the courses of study defined in the preceding paragraph. *b*. He must, in the judgment of his instructors, also possess other qualifications essential to success in teaching.

The Diploma is also given in connection with higher degrees, provided a graduate student has taken a major or minor in Education, and has also satisfied the requirements *a* and *b* above, or in lieu of *a*, has completed an equivalent amount of pedagogical and other work in another institution.

UNIVERSITY SCHOLARSHIPS.

Holders of the Kendall Scholarship and the University Scholarships may register in Teachers College on the same terms as in other departments of the University. For particulars see page 49.

PRACTICE TEACHING.

Ample opportunity will be afforded for practice in teaching by (a) attendance upon observation classes conducted by experienced teachers, and (b) actual practice in teaching under the supervision and subject to the criticism of teacher critics.

EXPERIMENTAL WORK.

A psychological laboratory for introductory experimental work occupies the entire fourth floor of the Education Building. It comprises an instrument room, a general laboratory, a research room, a

dark room for experiments on vision, and a photographic dark room. The equipment is specially adapted to the investigation of problems of interest to students of education. The advanced courses in experimental psychology are conducted at the Government Hospital for the Insane. These courses are modified each year to meet the requirements of the students electing them, and the facilities and equipment of this laboratory are in many respects unrivalled.

The school system of a large city, moreover, offers abundant opportunity for observation, and for the statistical study of methods and other practical educational problems.

TEACHERS COLLEGE LIBRARY.

A commodious room on the ground floor of the Education Building has been devoted to the purposes of a department library. The library is supplied with the most important reference books and periodicals in Education, Psychology, and Philosophy, together with the principal Reports, etc. The reading room is open from 9 a. m. to 12 m. and from 1.30 p. m. to 6 p. m., each day of the University calendar year. In addition, books may be withdrawn over night and from Saturday to Monday. For a statement of other library facilities see "University Library," page 13, and "Libraries," page 15.

TEACHERS APPOINTMENT BUREAU.

The Teachers College maintains a Teachers Appointment Bureau for the purpose of aiding students who are studying, or have studied, in the Teachers College, or in the College of Arts and Sciences, to secure positions as teachers. This service is performed gratuitously, in the interest both of students and of superintendents of schools and boards of education wishing to employ teachers. Communications should be addressed to the "Teachers Appointment Bureau," Teachers College, The George Washington University.

DIVISION OF ARCHITECTURE.

ADMISSION.

Each applicant for admission is required to present a testimonial of good moral character, and also a certificate of standing and regular dismissal from the school or college which he has attended or from the tutor with whom he has studied.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required books and subjects.

The requirement for admission is a four-year high school course, or its equivalent, amounting to fifteen "units." A unit is a subject studied one school-year of five periods a week. Seventy-five such periods or "counts" make the fifteen-unit requirement.

These fifteen units must include English, 3 units; Mathematics, 2 units; and one of the following languages: Latin, 4 units; Greek, 3 units; French, 2 units; German, 2 units; or Spanish, 2 units. The remainder of the requirement is elective and may be satisfied in general by any high school subject approved by the College Entrance Examination Board. Subjects that will be accepted are described on pages 33-41 of this catalogue.

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN ARCHITECTURE.

To be recommended for the degree of Bachelor of Science in Architecture the student must be registered in the Division of Architecture for at least one academic year, he must satisfy the admission requirements, and must complete the prescribed course for the degree. This is a four-year course. General culture studies are pursued through the first two years, about half of the time being devoted to them. The rest of the course is devoted to architectural work. The unit of credit is one hour of recitation or lecture per week throughout the academic year. Laboratory hours count one-fourth unit each.

First Year.

	Hours.
English	3
French, Italian, or German.....	3
Science	3
Architectural Drawing (3).....	3
Shades, Shadows, and Perspectives (4).....	2
Freehand Drawing (2).....	1

Second Year.

Hours.

English	3
French, Italian, or German.....	3
Science	2
Rendering, Design (3).....	3
Freehand Drawing (6).....	2
History of Architecture (20).....	2

 15
Third Year.

Mechanics of Materials (First term).....	3
Graphic Statics (Second term)	
Building Construction (21).....	2
History of Architecture (32).....	2
Pen and Ink Rendering (27) or Water Colors (34)....	1
Design and Sketch Design (25).....	4
Drawing from the Antique (26).....	1
Water Colors (34).....	2

 15
Fourth Year.

Design and Sketch Design—Thesis (27).....	4
Sanitary Engineering	2
History of Painting and Sculpture (31).....	1
Building Construction (33).....	2
Drawing from Life (35).....	1
Water Colors (34).....	2
History of Architecture (23).....	2
Office Practice (36).....	1

 15

A special course may be arranged for qualified students who wish to take the purely technical work of the Architectural course. Special students to receive a certificate on the satisfactory completion of the course as outlined below.

First Year.

Architecture (3)	3
Shades and Shadows (4).....	2
Freehand (2)	2
Construction (21)	2

 9

<i>Second Year.</i>	<i>Hours.</i>
Architecture (5)	3
Construction (33)	2
History (Classical and Medieval).....	2
Freehand (6)	2
Pen and Ink (27) or Water Colors (34).....	1
	<hr/>
	10

<i>Third Year.</i>	
Architecture (25)	3
History (Renaissance), (23).....	2
History (Painting and Sculpture, or Archæology).....	1
Water Colors (34).....	2
Advanced Freehand	2
	<hr/>
	10

In addition, before the certificate will be awarded the student must show that he has satisfactorily completed courses 26, 35, and 39.

PRIZES.

The Washington Architectural Club offers membership in the Club as a prize in Architecture. In 1903-04 this prize was awarded to Charles R. Lombard; in 1904-05 to W. H. I. Fleming; in 1905-06 to S. Peter Wagner; in 1906-07 to Reginald W. Geare; in 1907-08 to Meade Bolton with honorable mention to Carrington Foster; in 1908-09 to Nevell S. Buckingham with honorable mention to Warner Addison Ebbetts.

The Architectural League of America offers an annual Traveling Scholarship in Architecture, value \$1200 to students and draftsmen in Architecture under 35 years of age. All architectural students in the University, who are members of the George Washington University Architectural Club are eligible to compete for this prize.

The following prizes are open to students taking Beaux Arts problems:

PARIS PRIZE.

This prize, conducted by the Society of Beaux Arts Architects, gives to the winner, by authorizations of the French Government, the privilege of following the lectures and of taking part in the competition of the first class in Architecture at the École des Beaux Arts of Paris; he must, however, have already successfully pursued studies corresponding to those prescribed in the second class at that institution, for which condition he will be allowed six months to qualify. The winner, moreover,

receives a stipend of two hundred and fifty dollars quarterly during his stay abroad, which should last two and one-half years.

Competitors must be under twenty-seven years of age.

WARREN PRIZE.

This consists of two prizes of fifty dollars and twenty-five dollars, respectively, for the most successful solution of a problem in planning.

PUPIN PRIZE.

Two prizes of fifty dollars and twenty-five dollars, respectively, are offered by Prof. PUPIN, of Columbia University, for the best designs for the ornamental treatment of some scientific appliance.

Department of Arts and Sciences.

COURSES OF INSTRUCTION.

UNIVERSITY SUBJECTS.

University Subjects are divided into three sections, in accordance with the following requirement of an ordinance adopted by the Board of Trustees, October 12, 1902:

ARTICLE IV.—*Development of University Subjects.*

SECTION I. Subjects shall be divided into three sections, as follows:

(1) The fundamental section, covering two years' work; this section to be assigned to students in the general-culture courses.

(2) The advanced section, not exceeding three years; this section to be assigned to students specializing for literary, scientific, professional, or industrial pursuits.

(3) The original research section; this section to be assigned to students pursuing a subject for discovery and broader culture.

First-section courses can be taken by third- or fourth-year students only by permission of the Dean and the professor in charge of the subject. They may sometimes be recommended to graduate students, but are not counted toward the higher degrees. The courses in the second section are in general for advanced students, candidates for the Bachelor's degree; they serve, however, with additional work as minors for the higher degrees, provided they have not already counted toward a degree. They may be taken by students in the second year of their course only by special permission of the professor in charge. The courses in the third section are in general for graduate students only, candidates for one or other of the higher degrees. They are open to undergraduates only on the recommendation of the instructors, and no undergraduate student shall take in one year more than one course in the third section. When an announced course has not been applied for by at least three students, candidates for a degree, the instructor may withdraw the course. First-section courses are numbered 1 to 19, inclusive; second-section courses from 20 to 39, inclusive; third-section courses are numbered on from 40. The number of hours, unless otherwise specified, indicates hours per week throughout the year. The unit of credit is one hour of recitation or lecture work per week for one academic year; laboratory hours in Chemistry and Architecture count

one-third unit each, in other subjects one-half unit each. Sixty units of credit is the minimum requirement for the Bachelor's degree. Laboratories and drawing-rooms will be open from 9 a. m. till 10 p. m., with competent assistants in charge to direct students. No student is admitted to a course unless he fulfills all of the preliminary requirements for that course, or otherwise satisfies the instructor that he is prepared to pursue it. Every student must make his election of courses so as to avoid conflict between the hours appointed for recitations.

ANATOMY.

D. KERFOOT SHUTE, A.B., M.D.....Professor

Third Section. Primarily for Graduates.

40. Anatomy of the Nervous System.—The nervous system is investigated in typical animals of the different classes, especially with the view of gaining some insight into the phylogeny of the central nervous system in man. The growth of the brain and its physical characters as related to intelligence are investigated. The histology and embryology of the central nervous system and the sense organs are studied. A history of the guiding conceptions in neurology is to be acquired. The course is designed to inculcate students of anatomy, medicine, and psychology with a sound knowledge of the architecture and functions of the nervous system of man. Two hours. Professor SHUTE.

ARCHITECTURE.

PERCY ASH, B.S.....Professor
ALBERT BURNLEY BIBB.....Professor
CHAS. MASON REMEY.....Assistant Professor
W. H. I. FLEMING, B.S.....Assistant
DELOS H. SMITH, B.S.....Assistant

Criticisms in design are regularly given by practicing architects, in addition to the regular corps of instructors.

First Section. Primarily for Undergraduates.

1. Freehand Drawing. This course consists of drawing, in charcoal, of cubes, cones, etc. Professor BIBB.

2. Freehand Drawing. For architectural students primarily. This course begins with drawing, in charcoal, of cubes, cones, etc., and is followed by a series of drawings from architectural casts. *Mon.* 4.50, *Wed.*, 10 to 12 and 5.40. Professor BIBB.

3. Architectural Drawing and Elementary Design. This course includes the study of the Five Orders of Architecture, the use of India

ink, and water-color rendering. Lectures on the Five Orders on Tuesday, at 4.50, and at least eleven additional hours in the drafting-room. Professor ASH.

4. Shades, Shadows, and Perspectives. A course in orthographic projections, shades, shadows, and perspectives. *Tues.* and *Fri.*, at 11 and 5.40. Assistant Professor REMEY.

5. Rendering and Design. In this course the instructions in India ink rendering and the use of water colors given in the first year are continued. At least twelve hours each week are devoted to the problems in design. Six regular problems and five sketch problems constitute the course in design. Criticism, by Professor ASH and Assistant Professor REMEY.

6. Freehand Drawing. The drawing from architectural casts in both charcoal and pencil continues the work begun in the first year, and is intended to fit the student for his subsequent freehand drawing from the antique. *Mon.* 4.50, *Wed.* 10 to 12 and 5.40. Professor BIBB.

Second Section. For Undergraduates and Graduates.

20. History of Architecture. History of Classical and Early Christian architecture. Illustrated. Two lectures per week. *Tues.*, *Fri.*, at 4.50. Professor BIBB.

21. Building Construction. Frame construction and interior finish. Professor ASH.

22. Sanitary Engineering of Buildings. One hour. (Course to be arranged.)

23. History of Architecture. History of Renaissance architecture. Illustrated. Two lectures per week, and one additional hour for research. *Mon.*, *Fri.*, at 4.50. Professor ASH.

24. Pen and Ink Rendering. A study of the works of the best draftsmen, with practice in the use of the pen as a means of architectural expression. *Th.*, 10 and 4.50. Professor ASH.

25. Design and Sketch Design. This course embraces problems in plan, in archæology, and in sketch design. Three problems in archæology, three plan problems, and five sketch problems constitute the course. The student is required to spend at least sixteen hours in the drafting-room each week. Criticism, by Professor ASH and Assistant Professor REMEY.

26. Drawing from the Antique. To be eligible for this course the student must have passed satisfactorily Course 6. He is required to devote at least four hours per week to working from the antique in the Corcoran Gallery of Art.

27. Design and Sketch Design. Thesis. Problems of an advanced character are assigned to the student during the first term. Three ad-

vanced problems and three sketch problems are required of the student in addition to his thesis. The three months preceding graduation are devoted to the production of the thesis designs, the subject for the thesis being selected by the student. The student is required to spend sixteen hours each week in the drafting-room. Criticism is given three times a week by Professor ASH and Assistant Professor REMEY.

28. Modeling (Architectural). This course will be arranged and an instructor appointed at an early date.

29. History of Art, a course in the history of sculpture, architecture, and painting. (a) Greek and Roman. First half-year. (b) Renaissance and Modern. Second half-year. *Mon., Wed., Fri.*, at 1.30.

30. History of Painting and Sculpture. This course will comprise a series of illustrated lectures on painting and sculpture. Professor BIBB.

31. History of Mediæval Architecture. Two lectures and one hour for research per week. Professor BIBB.

32. Building Construction. Masonry, cements, foundations, soils, etc. *Mon.*, at 5.40, *Tues.*, 10, *Wed.*, 4.50, *Th.*, 10. Professor ASH.

33. Water Colors. *Th.*, at 4.50 and 5.40. Professor BIBB.

34. Drawing from Life. Six hours per week at the Corcoran Gallery of Art.

35. Office Practice. A course of practical planning and detailing. Four hours per week. Professor ASH.

36. A special course in design will be given, consisting of six regular and five sketch problems. This course is intended to prepare students for the Beaux Arts problems. Criticisms, by Professor ASH and Assistant Professor REMEY.

37. In this course the problems prepared by the New York Society of Beaux Arts Architects will be offered to the students, and the judgments will be made by the jury in New York City under the rules of the society. Criticisms, by Professor ASH and Assistant Professor REMEY.

38. Summer Work. Each architectural student is required during the summer vacation to make at least twenty-four sketches from nature, or to do an equivalent amount of work; namely, four weeks in an architect's office, or the measured drawings of an existing monument of architecture.

Third Section. Primarily for Graduates.

40. Composition as applied to architecture.

41. Advanced design.

ASTRO-PHYSICS.

FRANK HAGAR BIGELOW, A.M., L.H.D.....Professor
FREDERICK E. FOWLE, Jr.....Lecturer

Third Section. Primarily for Graduates.

40. Solar Physics. Professor BIGELOW.
41. Cosmical Electricity and Magnetism. Professor BIGELOW.
42. Terrestrial Magnetism. Professor BIGELOW.
43. Meteorology. Professor BIGELOW.
44. A lecture course on the astro-physical instruments employed in modern research. To be taken in connection with Courses 40 and 41. Mr. FOWLE.

BACTERIOLOGY AND PATHOLOGY.

JOSEPH J. KINYOUN, M.D., Ph.D.....Professor

Third Section. Primarily for Graduates.

40. Bacteriology. Special studies and practical research work. Professor KINYOUN.

BIOLOGICAL SCIENCES.

THEODORE NICHOLAS GILL, M.D., Ph.D., LL.D.....Professor
 PAUL BARTSCH, M.S., Ph.D.....Professor
 ALBERT MANN, A.M., Ph.D.....Professor

ZOÖLOGY.*First Section. Primarily for Undergraduates.*

1. Systematic Zoölogy. I. Invertebrates. This includes lectures and laboratory work. The lectures in their scope cover all the branches of Invertebrates, and correlated with these lectures is the study and dissection of typical specimens in each group. This course is intended to familiarize the student with biological characters, classificatory laws, and the general principles of evolution. Lecture, one hour; laboratory, two two-hour periods. Professor BARTSCH.

2. Systematic Zoölogy. II. Vertebrates. This includes lectures and laboratory work. The lectures will cover the various branches of Vertebrata and correlated with these is the study and dissection of typical specimens of each group. Open only to students having completed Course I. Professor BARTSCH.

3. Biology. Introductory course. The physiology, morphology, and natural history of type forms, selected from both the plant and animal kingdoms, are studied in the laboratory and lecture-room. Drawings are carefully made of gross and microscopic anatomy. During part of the second term slides and embryos of the frog or chick are prepared and studied. Lectures are given on the biological theories; and trips are made to the museums and collecting grounds.

Second Section. For Undergraduates and Graduates.

20. Practical Zoölogy. A lecture course illustrated with lantern slides and demonstrations. In this course only beneficial and injurious animals of all classes will be considered, especial stress being laid upon the problems of preservation and extermination. The course aims to expound the economic side of zoölogy. Open to all students. One hour. Professor BARTSCH.

23. Ornithology. A systematic course embracing lectures and laboratory work. The lectures are illustrated with lantern slides, showing the home life of birds. The laboratory work consists in classifying bird skins, of which the University possesses an excellent series. Special attention is directed to the study of the birds of the District of Columbia, and frequent field excursions are made to familiarize the student with the haunts and habits of these forms. Lecture, one hour; laboratory, one two-hour period. Professor BARTSCH.

Laboratory courses in histology and physiology will be arranged for competent students.

Third Section. Primarily for Graduates.

40. A general course of lectures on the principles of zoölogy, including a consideration of the philosophy, the methods of investigation, and the systems of zoölogy as determined by comparative anatomy. The lectures are supplemented by work in the laboratory, embracing histology, microtomy, and dissection. The student is required to take up some subject or group for original investigation. Professor GILL.

The collections of the United States National Museum and the Smithsonian Institution are consulted in connection with all these courses.

THE JAMES CRICHTON COLLECTION.—An accession of value and interest to the Zoölogical laboratory is a recent gift to the University of a collection of butterflies, made by Mr. James Crichton. It is given to the University by the friends of Mr. Crichton as a memorial to him, and it is known as the "James Crichton Collection."

BOTANY.

Third Section. Primarily for Graduates.

40. Original investigations in (a) Economic Botany, Materia Medica, etc.; (b) Parasitism and Monstrosities; (c) Researches in Physiology of single groups; (d) Comparative Organography. Professor MANN.

CHEMISTRY.

CHARLES E. MUNROE, Ph.D. Professor
FRANK WIGGLESWORTH CLARKE, Sc.D. . Professor of Mineral Chemistry

HARVEY W. WILEY, Ph.D., M.D.	Professor of Agricultural Chemistry
EDWARD G. SEIBERT, M.D.	Assistant Professor of Chemistry
N. MONROE HOPKINS, Ph.D.	Assistant Professor
EDWIN A. HILL, Ph.D.	Assistant Professor
THOMAS M. PRICE, Ph.D.	Assistant Professor
I. K. PHELPS, Ph.D.	Assistant Professor of Physiological Chemistry
OTIS D. SWETT, M.S.	Instructor
HOWARD B. LEWIS, B.A.	Teaching Fellow

First Section. Primarily for Undergraduates.

1. General Chemistry. A series of illustrated lectures, accompanied by recitations and exercises, on theoretical, inorganic, organic, and technical chemistry. *Tu., Th., Sat.*, at 4.50. Professor MUNROE, Mr. SWETT.
2. Laboratory Practice. A laboratory course for the study of the principles of chemistry and the methods of conducting chemical experiments. Two three-hour periods. *Tu., Th.*, at 1.30. Professor MUNROE, Assistant Professor HILL, Mr. SWETT, Mr. LEWIS.
3. Preparation and Study of the Properties of Chemical Substances. A laboratory course. Two three-hour periods. *Tu., Th.*, at 1.30. Professor MUNROE, Mr. SWETT, Mr. LEWIS.
4. Assaying and Metallurgy of the Precious Metals, carried on by the methods used by the Government assayers, the laboratory being fitted up on the plan of that of the United States Mint. Twelve hours, for three months. Professor MUNROE, Mr. SWETT.
5. Lectures on the Principles of Analysis. One hour. Professor MUNROE.
6. Metallurgy of Iron and Steel. A course of lectures and readings. *Tu.*, at 5.40. Professor MUNROE.
7. Qualitative Analysis. A brief course intended primarily for students in engineering. Two three-hour periods. Professor MUNROE, Assistant Professor HILL, Mr. SWETT, Mr. LEWIS.

Second Section. For Undergraduates and Graduates.

20. Qualitative Analysis. A laboratory course in the study of the properties and reactions of chemical substances, and of the means employed for their detection and identification. Three three-hour periods. Professor MUNROE, Assistant Professor PRICE, Mr. SWETT.
21. Quantitative Analysis. A laboratory course in the quantitative estimation of the constituents of a specially selected and typical set of chemical substances, which are particularly adapted for teaching the student the aims and methods of quantitative chemical analysis and for imparting facility in manipulation. Four three-hour periods. Professor MUNROE, Assistant Professor PRICE, Mr. SWETT, Mr. LEWIS.

23. Advanced course in Organic Chemistry. *Wed., Fri.*, at 4.50. Professor MUNROE, Mr. SWETT.

24. Advanced course in Organic Chemistry. A continuation of Course 23. *Th., Sat.*, at 5.40. Professor MUNROE, Mr. SWETT.

25. Chemistry of the Carbon Compounds. A laboratory course in the preparation and study of the properties of a characteristic series of organic compounds. Four three-hour periods. Professor MUNROE, Mr. SWETT, MR. LEWIS.

27. Stereo-chemistry. This course deals with the arrangements of atoms in space from a theoretical standpoint, while the student is taught how to form models by which to illustrate their arrangements. Two hours. Assistant Professor HILL.

28. Biochemistry. A laboratory course in the chemical examination of some of the chief foodstuffs, the tissues and fluids of the body, and the products of certain organisms; also the isolation of the digestive enzymes and a study of their action *in vitro*. Three three-hour periods. Assistant Professor PRICE.

29. Organic Chemistry. Especially designed for students in medicine and dentistry. Two hours for one term. Professor MUNROE.

30. Physiological Chemistry. A series of lectures and recitations on the proximate principles of the human body. Two hours for one term. Doctor PHELPS.

31. Clinical Analysis. A laboratory course to accompany 29. Professor MUNROE, Doctor PHELPS, Mr. LEWIS.

Third Section. Primarily for Graduates.

40. Explosive Substances. Professor MUNROE.

41. Analytical Methods. Professor MUNROE.

43. Development of the Theory of the Constitution of the Natural Silicates. Professor CLARKE.

44. Special Researches in Agricultural Chemistry. Professor WILEY.

45. Special Researches in Electro-chemistry. Assistant Professor HOPKINS.

Students in Chemistry are invited to attend the meetings of the Chemical Society of Washington. These meetings are held on the second Thursday of each month from October to May, in the Assembly Hall of the Cosmos Club, at 8 p. m.

CLASSICAL LANGUAGES AND LITERATURES.

MITCHELL CARROLL, Ph.D. Professor
CHARLES SIDNEY SMITH, Ph.D. Professor

GREEK.

First Section. Primarily for Undergraduates.

1. Lysias (selected orations); Herodotus (selections); Euripides (Alcestis); Greek prose composition. *Mon., Wed., Fri.*, at 2.30. Professor SMITH.

2. Thucydides (Book VII); Sophocles (Antigone); Xenophon (Memorabilia). *Mon., Wed., Fri.*, at 11. Professor SMITH.

A. Elementary Course. For students who have not taken Greek before matriculating. It aims to cover as much as possible of the entrance requirements in Greek. Three hours. Professor SMITH.

B. Homer: Iliad I-IV or Odyssey V-VIII. For students who have taken the elementary course and desire to enter Course 1. Two hours. Professor CARROLL.

Second Section. For Undergraduates and Graduates.

20. Plato (selections); Aristophanes (Clouds); The Attica of Pausanias. Given in 1908-09. Not given in 1909-10. Professor CARROLL.

21. Greek Literary Criticism: Aristotle (Art of Poetry); Aristophanes (Frogs); Greek Lyric Poetry (selections); Conferences on History of Greek Literature. *Tu., Th.*, at 9. Professor CARROLL.

22. Greek Prose Composition (advanced course): Practical exercises in syntax and translation. *Th.*, at 11. Professor CARROLL.

LATIN.

First Section. Primarily for Undergraduates.

1. Livy (Books I, XXI); Cicero (De Senectute); Horace (Odes and Epodes); Latin prose composition. *Mon., Wed., Fri.*, at 3.30. Professor CARROLL and Professor SMITH.

2. Cicero and Pliny (selected letters); Satires and Epistles of Horace; Ovid (selections); Martial (selections). *Mon., Wed., Fri.*, at 1.30. Professor CARROLL and Professor SMITH.

Second Section. For Undergraduates and Graduates.

20. Tacitus (selections); Plautus and Terence. Given in 1908-09. Not given in 1909-10. Professor CARROLL and Professor SMITH.

21. Roman Literary Criticism: Quintilian (Book X) and Horace (Ars Poetica); Catullus, Tibullus, and Propertius. *Tu., Th.*, at 10. Professor CARROLL and Professor SMITH.

22. Latin Composition and Reading at Sight: Practice in Latin expression and style. *Tu.*, at 1.30. Professor SMITH.

23. Law Latin. For law students and others who desire preparation in Latin for the study of Roman Law. Two hours. Mr. HENDRY.

TEACHERS COURSES IN SECONDARY LATIN.

In these courses the teacher is trained for the work of the class-room. In addition to the reading of the authors, each course includes a review of forms, syntax, and prose composition, practice in conducting recitations and discussion of methods of secondary instruction.

24. Cicero's Orations. *Wed.*, 4.50-6.30. Professor CARROLL and Professor SMITH.

25. Cæsar's Gallic and Civil Wars. Two hours. Not given in 1909-10. Given in 1910-1911. Professor CARROLL and Professor SMITH.

26. Virgil's *Æneid*. Two hours. Given in 1908-1909. Not given in 1909-10. Professor CARROLL.

CLASSICAL ARCHÆOLOGY.

20. Greek and Roman Civilization. Two hours. Given in 1908-09. Not given in 1909-10. Professor CARROLL.

21. History of Art. A study of Greek and Roman Architecture, Sculpture and Painting, followed by a sketch of the history of these arts in the Renaissance and in modern times. The course is illustrated by prints, photographs and lantern slides. *Mon., Th.*, at 2.30. Professor CARROLL.

22. Parallel with Course 21. *Mon. Th.*, at 4.50. Professor CARROLL.

Third Section. Primarily for Graduates.

The Seminary of the Classics is designed to afford discipline in the methods of philological criticism and research with special reference to the interpretation of classical authors. The authors selected are as follows:

1908-09. Greek 40, Homer; Latin 40, Virgil.

1909-10. Greek 42, Greek Historians; Latin 41, Roman Historians.

1910-11. Greek 41, Attic Orators; Latin 42, Cicero's Orations.

Regular meetings of the Seminary are held *Tu., Fri.*, 4.50-6.30. Professor CARROLL.

THE UNIVERSITY CLASSICAL CLUB.

The University Classical Club composed of instructors and advanced students in Greek, Latin and Classical Archæology, meets monthly, for the consideration of topics in ancient life, literature and art. Students in classics are invited to attend the public meetings of the Washington Society of the Archæological Institute of America and of the Washington Classical Club.

AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS.

The University, through friends, is a contributor to the support of the American School of Classical Studies at Athens, and graduates of this University are admitted without expense for tuition.

COMMERCE AND TRANSPORTATION.

HENRY PARKER WILLIS, Ph.D.....	Professor
ROBERT R. KERN, Ph.D.....	Instructor
JOHN BALL OSBORNE, A.M.....	Lecturer
JOHN WILMER LATIMER, LL.B.....	Lecturer

Second Section. For Undergraduates and Graduates.

20. Commercial and Maritime Law. An outline of the principles of the law relating to commercial transactions generally, including those peculiar to the sea, with more especial reference to the subjects of contracts, sales, bailments, agency, partnership, negotiable instruments and common carriers. Second half-year. *Tu., Th., Sat., 4.50 p. m.* Mr. LATIMER.

21. Commercial and Industrial History. The rise and progress of commerce from antiquity to modern times, with particular emphasis on the effects of commerce upon civilization and the relations between commercial and political development. The rise and progress of economic activities in the English colonies of North America and of the agricultural, commercial, and industrial growth of the United States. First half-year. *Tu., Th., Sat., 9 a. m.* Dr. KERN.

22. Modern Business Organization. A study of the modern business, the present modes of producing and distributing commodities, modes of controlling prices, systems of retailing, advertising, etc. Second half-year. *Tu., Th., Sat., 9 a. m.* Dr. KERN.

23. Commerce and Industries of the United States. A study of the resources, industries, business activities, and internal and foreign commerce of the United States; the products of the various sections, the transportation systems by which they are interchanged or assembled for manufacturing and redistribution; the manufacturing systems; the exchange among our own people; the distribution to foreign countries; the markets in which exports are sold and from which imports are drawn. Three hours, first half-year. Not given in 1909-10. Dr. KERN.

24. Commercial Geography. The products, industries, and commerce of the various countries and sections of the world; the exchanges between climatic sections and between the great producing and manufacturing sections and countries of the world; the staple articles of commerce, their places of production and sale; the manufacturing industries, and the distribution of their products; the transportation and financial systems by which interchanges are facilitated; a comparative view of the commercial, economic, and financial conditions in the various sections and countries of the world, including a brief outline of commercial history. Three hours, second half-year. Not given in 1909-10. Dr. KERN.

25. International Trade. A discussion of the theory and mechanism of international trade, followed by a study of the trade relations of the United States and the conquest of foreign markets. Two hours, first half-year. *Tu.*, 4.50 to 6.30 p. m. Mr. OSBORNE.

26. Commercial Policies. Study of the trade policies of the principal commercial powers; history of the policy of reciprocity; commercial treaties and agreements of the United States; doctrine of the most favored nation; tariffs of the United States and the principal foreign countries, particularly the double tariff system. Second half-year. *Fri.*, 8 a. m. Mr. OSBORNE.

Third Section. For Graduates.

40. Transportation. An inductive study of the status of American railways and other common carriers. The rise and development of the railway, the location, chartering, and financing of a line, general features of operation, rate theories and practices, rebates, rate wars, pools, consolidations, the rise of government supervision, and the experience of France, England, and Germany in all these items is the scope of this course. It presupposes either familiarity with the elements of political economy, or railway experience. Two hours, throughout the year. *Tu.*, 4.50 to 6.30 p. m. Dr. KERN.

41. Transportation Problems. Detailed studies in the rate problem connected with certain commodities, the relation of express companies to railways, coordination of waterways with railways, ocean transportation, export and import rate discriminations, and current topics. Open to those who have taken the course in Transportation or its equivalent. Seminary methods to be followed in part. Two hours, throughout the year. Not given in 1909-10. Dr. KERN.

42. Government Control of Transportation. A study of the constitutional powers of Congress over the agents, instrumentalities, and subjects of foreign and interstate commerce; the conflicts between federal regulation and the exercise of the police and taxing powers of the several States, and the powers and functions of the Interstate Commerce Commission. Two hours, throughout the year. *Th.*, 4.50 to 6.30 p. m. President NEEDHAM.

ECONOMICS AND FINANCE.

HENRY PARKER WILLIS, Ph.D.....	Professor
ROBERT R. KERN, Ph.D.....	Instructor

Second Section. For Undergraduates and Graduates.

20. General Economics. An outline course in the principles of political economy, devoted mainly to the study of production and exchange

under present-day conditions. Given in two sections. First half-year. *Mon., Wed., Fri.*, 11 a. m. (Section a), 5.40 p. m. (Section b). Dr. KERN.

21. The Economics of Distribution and Consumption. A continuation of Course 1, devoted mainly to the problems of rent, interest, wages, and profits, and including an examination of competition, private property, luxury, saving, and speculation, in their effects upon human welfare. Given in two sections. Second half-year. *Mon., Wed., Fri.*, 11 a. m. (Section a), 5.40 p. m. (Section b). Dr. KERN.

22. Public Finance. A course in the development of budgetary and fiscal methods and principles. The history and tendencies of public expenditure under the Federal and State governments. The theory of taxation; administration of public domains, and industries; public debts. First half-year. *Tu., Th.*, 10 a. m. Professor WILLIS.

23. Money and Banking. The history and theory of money; the production of the precious metals; the theory of prices and measurement of price fluctuations; monetary systems; the relation of the Treasury system to our money supply; the theory of credit and banking; the national bank system of the United States and the banking system of foreign nations. Second half-year. *Tu., Th.*, at 10 a. m. Professor WILLIS.

24. Accounting. General Principles of accounting; the more important forms of commercial paper and business methods. A text-book on accounting and hand-books dealing with accounting forms and methods are used as guides. Much of the work is based upon library readings. The course terminates with a study of the accounts of representative kinds of business and the methods of accounting and auditing applicable thereto. First half-year. *Mon., Fri.*, 5.40 p. m. Professor WILLIS.

25. Corporation Finance. The various sorts of corporation securities; methods of organizing and financing modern industrial enterprises; the nature of investment and speculation; stock and produce exchanges; the effect of speculative and investment operations on the staple industries. Second half-year. *Mon., Fri.*, 5.40 p. m. Professor WILLIS.

26. Theory and Practice of Statistics. The elementary principles of statistics, with concrete examples of their applications; the graphic method; the use of averages; index numbers; and the special application of statistics to insurance; government statistical methods and publications in the United States and in the principal foreign countries. Two hours, second half-year. Not given in 1909-10. Professor WILLIS.

Third Section. For Graduates.

40. Taxation. Taxation, its administration and organization. The legal problems which arise in connection with taxation will be studies

through typical cases. Two hours, second half-year. Not given in 1909-10. Professor WILLIS.

41. Advanced Accounting. A special study of accounting principles in their application to specified classes of business. Prerequisite—the course in accounting. First half-year. *Wed.*, 5.40. Professor WILLIS.

42. Insurance. The historical development of insurance; its economic aspects; fire, accident, and life insurance, from the standpoint of internal organization; rates; policies. Second half-year. *Wed.*, 5.40. Professor WILLIS.

43. Labor Problems. A brief sketch of the labor movement in the United States and of the aims and methods of trade unions, followed by a discussion of such problems as: Child labor; dangerous occupations; workingman's insurance against sickness, old age, accidents and unemployment; strikes and industrial conflicts; conciliation and arbitration; collective bargaining. Two hours, second half-year. Not given in 1909-10. Dr. KERN.

ENGINEERING.

PHILANDER BETTS, M.S., E.E.....	Assistant Professor of Electrical Engineering
EDWIN V. DUNSTAN, C.E.....	Assistant Professor of Civil Engineering
OSCAR A. MECHLIN, C.E.....	Assistant Professor of Civil Engineering
ARTHUR CUTTS WILLARD, B.S.....	Assistant Professor of Mechanical Engineering
F. CHARLES STARR, B.S.....	Instructor in Civil Engineering
CHARLES W. MORTIMER, M.E.....	Instructor in Electrical Engineering
.....	Assistant in Drawing

APPLIED MATHEMATICS.

Second Section. For Undergraduates and Graduates.

20. Analytical and Applied Mechanics. (1) Statics: including the composition, resolution, and equilibrium of forces; center of gravity; friction; machines. (2) Kinematics and Kinetics: including rectilinear and curvilinear motion; motion under action of variable forces and in resisting media; constrained and rotatory motion; impact; work and energy; moment of inertia. Four hours a week first half-year. Assistant Professor DUNSTAN.

21. Hydraulics. The theoretical principles of hydraulics: including hydrostatics, flow through orifices, over weirs, through pipes and in open channels, and the dynamic pressure of water. Experiments in connection with this course are made in the Engineering Laboratory. Four hours a week second half-year. Assistant Professor DUNSTAN.

22. Mechanics of Materials and Theory of Elasticity: including elastic and ultimate strength and deformation; simple, cantilever and continuous beams; columns, torsion; combined stresses; compound columns and beams: including reinforced concrete; resilience; work; fatigue; mathematical theory of elasticity. Four hours a week second half-year. Assistant Professor MECHLIN.

CIVIL ENGINEERING.

First Section. Primarily for Undergraduates.

1. Surveying and Mapping. This course includes the theory and use of instruments; land, topographic, hydrographic, mining, city, and geodetic surveying; measurement of volumes, projection of maps, etc. Two hours a week. Field work, usually on Saturday. Mr. STARR.

2. Railroad Engineering. Railroad curves and earthwork; location of about two miles of railroad, including reconnaissance, preliminary and final locations, construction of contour maps and profiles, computation of earthwork, design of culverts, etc.; laying out curves; track work, etc. Two hours a week. Field work, usually on Saturday. Assistant Professor DUNSTAN.

3. Highways and Pavements. Location of highways; construction, improvement and maintenance of roads and pavements; curbs, gutters, sidewalks. One lecture and one design period during the first term. Assistant Professor MECHLIN.

4. Materials of Construction. A study of the properties of stone, brick, cement, concrete, wood, iron, steel, etc., with reference to processes of manufacture. The course is supplemented by a number of practical tests made by the students. Two lectures for first term and one lecture and one laboratory period for second term. Assistant Professor MECHLIN.

5. Surveying Instruments. A two-months' course for Mechanical and Electrical Engineering students, covering the use of the compass, transit, and level. Lectures and field exercises, two hours per week. Mr. STARR.

6. Foundations. A two-months' course for Mechanical and Electrical Engineering students, covering the general principles of foundation construction and the materials used. Two hours a week. Assistant Professor MECHLIN.

8. A course in Practical Astronomy for Civil Engineering students. Special attention is given to the methods of determining latitude, longitude, azimuth and time with the engineer's transit; observations for each being a required part of the course. Reference book: Young's

"Manual of Astronomy." Two lecture-recitation periods per week for one term. Mr. STARR.

Second Section. For Undergraduates and Graduates.

20. Masonry Construction. A course in the use of cement, brick, stone, and concrete, the design of foundations, retaining walls, dams, bridge piers and arches. Included in this is a short course in stereotomy. Two lectures and two design periods per week. Assistant Professor MECHLIN.

21. Hydraulic Engineering. The design and construction of water power plants and irrigation works. Flow of rivers; rainfall and runoff; methods of development; hydraulic motors; power transmission. Irrigation plans; distributing systems; water rights and irrigation law. Two lectures and one design period per week. Assistant Professor DUNSTAN.

22. Theory of Structures. A course covering the determination of stresses in framed structures by graphical and by analytical methods. The first term is devoted to beams and roof trusses; the second to bridge trusses under uniform and wheel loads. Three lectures and two design periods per week. Assistant Professor DUNSTAN.

23. Theory of Structures. The theory of steel design; the design of a roof truss, of a plate girder and a pin connected bridge truss and a study of the theory and design of suspension, continuous, cantilever, and arch bridges, and the details of steel-mill and office-building construction. Three lectures and two design periods per week. Assistant Professor MECHLIN.

24. Sanitary Engineering. This course treats of the drainage of buildings and lands; the treatment and disposal of sewage and the sewerage of cities and towns; public water supply and methods of water purification. Three lectures and one design period per week. Assistant Professor MECHLIN.

Third Section. Primarily for Graduates.

40. Advanced Masonry. A course in the theory and design of reinforced concrete structures. Assistant Professor MECHLIN.

41. Advanced Masonry. The theory of retaining walls and arches. Assistant Professor MECHLIN.

42. Testing of Materials. This course involves original research upon assigned topics. Assistant Professor MECHLIN.

43. Water Power Development. A comparative study of the principal water power developments of the United States and Europe. The course consists largely of assigned readings and reports thereon. Assistant Professor DUNSTAN.

ELECTRICAL ENGINEERING.

First Section. Primarily for Undergraduates.

1. Elementary Mathematical Theory of Electricity and Magnetism, with special attention to the needs of engineering students. Three hours a week, until January 1. Mr. MORTIMER.

2. Direct-current motors and generators. Covers the laws of the magnetic circuit as applied to the dynamo. Students are required to design a direct-current machine. Text-books: Hawkins and Wallis's "The Dynamo." Three hours a week, beginning January 1. Mr. MORTIMER.

3. Elements of Electrical Engineering. Text-book: Tyson Sewell's "Elements of Electrical Engineering." Two hours a week. Mr. MORTIMER.

4. Electrical Measurements. A laboratory course for Juniors. Selected experiments. Foster's Hand-book and special laboratory notes are used for reference. Six hours a week, first term. Mr. MORTIMER.

5. Electrical Laboratory. Experiments and tests involving the operation of direct-current dynamos and motors, including tests of motors in service, operating elevators, street cars, and machinery of various kinds. Text-book: Sever and Townsend's "Laboratory and Factory Tests in Electrical Engineering." Six hours a week, second term. Assistant Professor BETTS and Mr. MORTIMER.

6. Industrial Electricity. A practical course intended for Juniors in Civil Engineering, embracing the selection and operation of electrical machinery, electric railways and other applications of electric motors. Two hours a week for the first term. Assistant Professor BETTS.

7. Electrical Engineering. A course in theoretical and applied electricity intended for Seniors in Mechanical Engineering. It embraces the selection and operation of electrical machinery, the location, construction, and operation of power plants, electric railways and transmission lines, the use of electric motors for driving machinery, and the working of storage batteries, elevators, hoists, and cranes. Three hours a week. Assistant Professor BETTS.

8. Electrical Design. A course for Seniors in Electrical Engineering, embracing calculation and design of electrical machinery and accessories, including switchboards, rheostats, instruments, and arrangement of same. One recitation period and one drawing period throughout the year. Assistant Professor BETTS, Mr. MORTIMER.

Second Section. For Undergraduates and Graduates.

21. Alternating Current Theory and Machinery. A course for Seniors in Electrical Engineering, covering the principles of single, as well as polyphase currents, including study of machines, circuits, transformers, etc. Four hours a week, Senior year. Mr. MORTIMER.

22. Electrical Distribution. A course for Seniors in Electrical Engineering, covering the whole field of distribution of electricity for light and power. Text-book: Crocker's Electric Lighting; second volume, "Distribution System." Two hours a week. Assistant Professor BETTS.

23. Electrical Applications. A course for Seniors in Electrical Engineering, covering the more important applications of electricity, such as motive power, including elevators, hoists and machine drive, telephony, telegraphy, electro-metallurgy, etc. One hour a week. Assistant Professor BETTS.

24. Advanced Laboratory Work for Seniors in the Electrical Engineering Course. Covers test and experimental work with direct and alternating currents, tests of machines, circuits, transformers, circuits containing inductance and capacity, measurement of power in alternating current circuits, plotting of curves, etc. Text-book: Sever and Townsend's "Laboratory and Factory Tests in Electrical Engineering," with Foster's Electrical Engineer's Hand-book for general reference. Six hours a week. Assistant Professor BETTS, Mr. MORTIMER.

25. Inspection of Plants and Industrial Works. In the vicinity of Washington and Baltimore are a number of modern electric lighting and street railway plants, telephone exchanges, telegraph operating rooms, Government laboratories devoted to special work, etc., which afford students of Electrical Engineering an opportunity to familiarize themselves with nearly all types of apparatus in use. The visits are followed by class discussion based on written descriptions submitted by the students.

26. Electric Lighting and Illumination. A course for Seniors in Electrical Engineering covering the subject of electric lighting and illumination, including detailed study of different types of lamps, shades, arrangement of light sources, effect of walls, etc. Two hours per week first term. Assistant Professor BETTS.

27. Electric Railways. A course for Seniors in Electrical Engineering covering the theory and practice of modern, direct and alternating current railways. Two hours a week second term. Assistant Professor BETTS.

Juniors and Seniors in Electrical Engineering are required to attend the monthly meetings of the Washington Branch of the American Institute of Electrical Engineers held at the University.

Third Section. Primarily for Graduates.

41. Advanced Dynamo Design. This comprises the more rigid calculation of the magnetic circuit, the estimation of the electrical and mechanical losses, together with an exposition of the elements of mechanical design. Assistant Professor BETTS, Mr. MORTIMER.

42. Advanced Course in the Mathematical Theory of Alternating Currents. Assistant Professor BETTS, Mr. MORTIMER.

43. Advanced Course in Polyphase Currents. Assistant Professor BETTS, Mr. MORTIMER.

44. Advanced Laboratory Work, Alternating (including Polyphase) Current Apparatus. Assistant Professor BETTS, Mr. MORTIMER.

GRAPHICS.

First Section. Primarily for Undergraduates.

1. Mechanical and Freehand Drawing. A general course embracing the care and use of instruments; orthographic and isometric projections; sections and intersections; curve plotting; sketching of simple machine details; freehand lettering; principles of working drawings. Six hours a week in the drawing-room. Mr. STARR.

2. Advanced Mechanical Drawing. A course in working drawings especially designed for Electrical and Mechanical Engineering students. Drawing-room rules and practice; conventional forms and standards; arrangement of views and sections; freehand shop-sketches; detailing from sketches, models and general drawings; proportioning by empirical formulas. Six hours a week in the drawing-room.

8. Descriptive Geometry. A study of the representation of lines, surfaces, and solids, and of their relations; tangencies, intersections, and developments; warped surfaces; shades and shadows; original construction problems. Two lectures and one drawing period per week. Mr. STARR.

10. Topographic Drawing. A general course in plotting, topographic symbols, and lettering to accompany the work in surveying. One drawing period per week. Mr. STARR.

Second Section. For Undergraduates and Graduates.

20. Graphic Statics. Principles and methods, including the construction and use of the force and equilibrium polygons; dead, live, snow, and wind loads; the graphic analysis of beams, girders, roof, and bridge trusses. Two lectures and one design period per week. Assistant Professor DUNSTAN.

Third Section. Primarily for Graduates.

40. Advanced Graphic Statics. A study of the graphical analysis of higher structures, with special reference to the method of influence lines. Assistant Professor DUNSTAN.

MECHANICAL ENGINEERING.

First Section. Primarily for Undergraduates.

1. Mechanism. A course in the systematic study of the kinematics of machinery, in which mechanical movements are reduced to scientific

analysis. Carefully developed problems and diagrams of changes of position and speed in mechanisms are constantly used.

Some attention is given to the design of gear teeth, and valve gears for steam engines, and to the necessary theory for such design. Two lecture-recitation hours and two drawing hours per week during the Sophomore year.

4. Woodwork. Four hours per week in the shops during the Sophomore year.

5. Metal Work. Six laboratory hours per week during the Junior year. Electrical engineering students are given a modified course of three hours per week.

6. Engineering Drawing. This course provides for the application of the principles taught in the courses of Mechanism and Steam Engineering to specific problems. Practice is given in the design of valve gears and quick return motions, and in the determination of velocity diagrams for special engine and other linkages. There is also included the complete working drawings for a steam boiler. Six drawing hours per week during the Junior year. Assistant Professor WILLARD.

7. Machine Design. This course is an application of principles already acquired to problems in design, each student being required to complete every detail of the design undertaken.

The subjects taken as design problems are: The design of a boiler; permanent and temporary fastenings for machine parts; a crank; a large shaft with pulley and gear wheels, rotating and sliding pieces, etc. The constructive details and calculations are discussed and the limitations of theoretical and empirical formulas pointed out. Results are made to conform with experience and the best practice. One lecture-recitation hour and three drawing hours per week during the Senior year. Assistant Professor WILLARD.

9. Engineering Laboratory. A course of practical work in testing general engineering apparatus for efficiency. The work consists in indicating steam engines; determining the evaporative efficiency of boilers; tests on the strength of materials; measurement of the flow of water; gas-engine brake tests; refrigeration tests, and fuel value determinations. The student's observations and computations on any test are critically compared with those of the instructor. Six laboratory hours per week for the last half of the Junior year. Assistant Professor WILLARD, Assistant Professor BETTS.

10. Engineering Laboratory. This course is a completion of Course 9. Six hours a week during the Senior year. Assistant Professor WILLARD, Assistant Professor BETTS.

12. Elements of Steam Engineering. A course designed for the needs of Civil Engineering students. It deals briefly with valve gears, power plant accessories, thermodynamics, steam engines, steam pumps, and

steam boilers. Two lecture-recitation hours per week during the Senior year.

Second Section. For Undergraduates and Graduates.

20. Steam Engineering. The first half-year of the course deals with the principles of Thermodynamics; the properties of gases and vapors, especially steam; the flow of steam and other fluids, and the steam injector. The application of the above principles is discussed, and the simple, compound, and multiple expansion steam engines are studied.

The last half-year of the course is devoted to the study of steam boilers and power plants, and their accessories. A design, with plans and specifications, for a power plant of industrial proportions is required from each student. Three lecture-recitation hours per week during the Junior year. Assistant Professor WILLARD.

22. Internal Combustion Motors. This course will deal with the theory, design, and practice concerning gas, gasoline, and other engines. The work will include: (1) The fuels employed, their energy content, and its conversion into mechanical work; (2) the cycle of operations of the heat medium, with details of method of transforming heat into work, and types of motor; (3) the practical details of operation, mixing the charge, carburation, ignition, and governing; (4) the manipulation and practice, and a discussion of economy and performance from tests. The design of some simple type of motor will be completely worked out and discussed. Three lecture-recitation hours per week for the first half of the Senior year. Assistant Professor WILLARD.

23. Hydraulic Machinery. This course provides for an elementary study of hydraulic prime movers and pumping machinery. It includes a discussion of the theory and design of turbines and turbine blades for low and high heads, and turbine governors.

The course will also treat of impulse wheels; water motors of the piston type; machinery for the utilization of hydraulic pressure; hydraulic pressure pumps, and hydraulic presses; hydraulic tools; pumps operated by steam, electricity, or power; and high duty pumps and water meters. Two lecture-recitation hours per week for the first half of the Senior year.

25. Compression and Refrigeration Machinery. A course in which the principles of thermodynamics are applied to the commercial methods of compressing air and securing artificial refrigeration. The work will also include the mechanical principles concerned in the design of air compressors as well as the transmission of air in high-pressure piping.

The relative advantages of refrigeration systems will be discussed, as brought out in the theory and practice of actual machines using ammonia, air, and other gases, and fluids. Three lecture-recitation

hours per week in the last half of the Senior year. Assistant Professor WILLARD.

28. Industrial Management. A course dealing with the business systems of manufacturing establishments.

The work includes a study of the organization and relations of the various departments of an industrial establishment, both in the office and in the workshop. It also discusses the conduct of accounts, the methods of superintendence and of compensating labor, the determination of the costs of production, and the effect on costs of different systems of distributing indirect expenses. Two lecture-recitation hours per week for the last half of the Senior year. Assistant Professor WILLARD.

Third Section. Primarily for Graduates.

40. Advanced Gas-Engine Design, a short lecture course on multi-cylinder engines. Assistant Professor WILLARD.

41. Advanced Mechanical Engineering Laboratory, with fuel determinations, heat measurements, and gas analysis work. Assistant Professor WILLARD.

42. Advanced theory of governors, planimeters, and dynamometers for Steam Engineering. Assistant Professor WILLARD.

43. Advanced Engineering Drawing. Special problems. Assistant Professor WILLARD.

ENGLISH.

WILLIAM ALLEN WILBUR, A.M. Professor
DE WITT C. CROISSANT, A.B. Assistant Professor

First Section. Primarily for Undergraduates.

1. Rhetoric. A study of the principles of self-expression through language with lectures, recitations, and practice in composition. *Tu., Th., Sat.*, at 10. Assistant Professor CROISSANT.

2. Rhetoric. Parallel with Course 1. *Mon., Wed., Fri.*, at 4.50. Professor WILBUR.

NOTE.—Credit for Course 1 or 2 is requisite for admission to any other course in English.

3. English Literature. Lectures on the development of the literature, with the reading of representative masterpieces. *Tu., Th., Sat.*, at 4.50. Assistant Professor CROISSANT.

4. Humanistic Studies in English Literature: "Euphues;" "Advancement of Learning," Book I; "Ecclesiastical Polity," Book I; "The Complete Angler;" "The Pilgrim's Progress;" "Religio Medici;" "Clarissa Harlowe;" "Evelina;" "Emma;" "The Prelude" (Wordsworth); "Endymion." *Mon. Wed., Fri.*, at 10. Professor WILBUR.

Second Section. For Undergraduates and Graduates.

22. Shakespeare. The Comedies. Not given in 1909-10. Professor WILBUR.

23. Shakespeare. The Tragedies. *Mon., Wed., Fri.*, at 1.30. Professor WILBUR.

The Temple edition of Shakespeare is recommended.

28. Old and Middle English. Old English is studied the first term, and Middle English the second term. Bright's Anglo-Saxon Reader, and Emerson's Middle English Reader. (Advanced work may be arranged for competent students.) *Mon., Wed., Fri.*, at 3.30. Assistant Professor CROISSANT.

32. Elements of Literary Criticism. Lectures on the general principles of literature, and on the literary types. Discussion of examples. *Mon., Wed., Fri.*, at 2.30. Assistant Professor CROISSANT.

Third Section. Primarily for Graduates.

40. History of the English Language. Development of the sounds and inflections with some reference to the other Germanic dialects. A reading knowledge of German and previous study of Old and Middle English are prerequisite. Assistant Professor CROISSANT.

44. Seminary in English Literature. Subject in 1908-09: "Idylls of the King." Subject in 1909-10: "The Ring and the Book." *Th.*, 3.30 to 5.30. Professor WILBUR.

GEOLOGY AND MINERALOGY.

GEORGE P. MERRILL, Ph.D. Professor
TIMOTHY W. STANTON, Ph.D. Assistant Professor
R. S. BASSLER, Ph.D. Assistant Professor

First Section. Primarily for Undergraduates.

1. Mineralogy. Crystallographic, descriptive, and determinative mineralogy. This course is designed with especial reference to minerals as rock constituents or segregated as ore deposits. It includes, therefore, a discussion of not merely the crystallographic and theoretical, but the practical side of the subjects as well. Whenever possible, it should be considered as introductory to the courses in either systematic or economic geology. *Tu., Th.*, at 5.40.

2. Geology. Systematic geology; dynamical, structural, and stratigraphical. The course is designed to form a part of a general-culture course, or a preliminary course for those intending to make a specialty of geology. It includes lectures, recitations, laboratory and field work so far as hours will permit. Paleontology is treated as a branch of

geology, having especial reference to stratigraphy and correlation. **Text-books:** Scott's Introduction to Geology, Merrill's Rocks, Rock Weathering, and Soils. *Mon., Fri.*, at 5.40.

Second Section. For Undergraduates and Graduates.

20. Economic Geology. The course covers the subjects comprised under: (1) Mineral veins and metalliferous deposits, their mode of occurrence, origin, and classification; (2) the ores of iron, copper, lead, zinc, tin, silver, gold, mercury, antimony, etc.; and (3) the non-metallic minerals as the coals and hydrocarbon compounds; salts and materials used in chemical manufactures; abrasive, refractory, and fictile materials, pigments, gems, ornamental stones, building stones, limes, cements, and mineral waters. **Text-books:** Weed's Translation of Beck's Nature of Ore Deposits; Merrill's Stones for Building and Decoration and the Non-metallic Minerals. *Mon., Fri.*, at 4.50.

21. Paleontology. A course in lecture and laboratory work on the biological and geological relations of the more important types of animals and plants, with especial reference to their value in stratigraphic geology. Two hours.

Third Section. Primarily for Graduates.

Advanced study in Geology, both systematic and applied, is arranged to cover two years.

40. Advanced Geology and Paleontology. The student in this first-year course may devote his time largely, if necessary, to perfecting himself in methods; to general work in the laboratory and in the field; to the examination of geological materials, and to familiarizing himself with the literature of the subject.

41. Advanced Paleontology and Stratigraphic Geology. A continuation of Course 21. Besides the study of paleontological methods, the student is expected to pursue some special line of investigation in order to fit himself for original research.

‡

GERMANIC LANGUAGES AND LITERATURES.

HERMANN SCHOENFELD, Ph.D., LL.D.....Professor
A. F. W. SCHMIDT, A.M.....Assistant Professor

First Section. Primarily for Undergraduates.

I. Elementary. The essentials of German grammar; translation of prose and poetry; composition and dictation. This course is open only to beginners, and the work done is equivalent to that of a two years' course in high schools and academies of good standing. *Tu., Th., Sat.*, at 11. Assistant Professor SCHMIDT.

2. Parallel with Course 1. *Tu., Th., Sat.*, at 4.50. Assistant Professor SCHMIDT.

3. Selected texts from the foremost contemporary authors will be read and one or more of the German classics carefully studied. The work in grammar and composition done in elementary German will be continued on a more advanced plane, with special emphasis on syntax, word-formation, and the relationship of German and English. This course is equivalent to the advanced German of the admission requirements, and it is open only to students who have passed Course 1 or 2. or have satisfied the admission requirement in elementary German. *Mon., Wed., Fri.*, at 11. Professor SCHOENFELD.

4. Parallel with Course 3, except that in the second term scientific German is read. *Tu., Th., Sat.*, at 5.40. Assistant Professor SCHMIDT.

5. Advanced course in German syntax; principal difficulties of the language; idioms; synonyms; extensive translations, of the best English prosaists into German; essays; selected advanced prose; classical reading and literature; German history. Special training for advanced students in the historical and economic departments. Open to students who have passed Course 3 or have satisfied the admission requirement in advanced German. *Mon., Wed., Fri.*, at 1.30. Professor SCHOENFELD.

6. Parallel with Course 5. *Mon., Fri.*, at 4.50. Assistant Professor SCHMIDT.

Second Section. For Undergraduates and Graduates.

20. German Literature in the first half of the nineteenth century; its social and political aspects; special study of Kleist, Uhland, Heine; the Austrian School; the Romanticists; classicism till Goethe's death; essays, lectures, and collateral reading. *Mon., Wed., Fri.*, at 10. Professor SCHOENFELD.

21. Goethe's *Faust*. *Tu., Th.*, at 10. Professor SCHOENFELD.

The intervening periods of Modern German Literature will be studied during the subsequent academic year.

Third Section. Primarily for Graduates.

40. German Literature in the sixteenth century. Braune's *Neudrucke Deutscher Literaturwerke*. Humanism and Reformation, with special reference to Italian and French influences and their historical basis. Original readings from the Humanists, Hans Sachs, Fischart, and Luther's works. The reformatory projects of Cardinal Nicolaus Cusanus and of Erasmus, Hutten, and Reuchlin. Professor SCHOENFELD.

41. German Literature in the twelfth and thirteenth centuries, with special regard to the Nibelungen lay, the Gudrun saga, Wolfram von Eschenbach. The lyrics of Walther von der Vogelweide. The gram-

matical aspects of the classics of the first period of bloom. Professor SCHOENFELD.

The other phases of older German literature will be studied in subsequent years, so that the general range of the history of German Literature may be covered every three years.

45. The emerging of the Germanic, Romance, and Slavic races in European History. The Migration of Peoples. The Evolution of European States to the Rise of the Hapsburg House. Cultural elements influencing the three predominating races of Europe. (Selections from the historical sources are read and interpreted.) Professor SCHOENFELD.

47. Gothic. Introduction to comparative Indo-European grammar. 2 hrs. Assistant Professor SCHMIDT.

48. Old High German. The development of the German language. 2 hrs. Assistant Professor SCHMIDT.

49. Old Norse. The Eddas. 2 hours. Assistant Professor SCHMIDT.

Only one of the foregoing three courses (47, 48, 49) is given at a time.

For notice of the Richard Heinzel Germanic Library, see page 13.

HISTORY.

CHARLES CLINTON SWISHER, Ph.D., LL.D.....	Professor
WILLIAM RAY MANNING, Ph.D.....	Assistant Professor
JAMES FREDERICK PEAKE, A.M.....	Assistant Professor
GEORGE MORTON CHURCHILL, A.M.....	Instructor
HANS FRED'K ARTHUR SCHOENFELD, A.B.....	Assistant
WILLIAM HAMILTON, Ph.D.....	Lecturer

First Section. Primarily for Undergraduates.

1. Mediæval History (350-1500 A. D.). The history of Europe from the invasion of the barbarian tribes to the opening of the sixteenth century with emphasis upon the principal institutions of the Middle Ages and the intellectual, social, and political conditions that gave rise to the Renaissance. Three hours throughout the year. *Mon., Wed., Fri.*, at 2.30. Assistant Professor PEAKE.

2. Modern European History (1500-1908). Beginning with a study of the conditions brought about by the Renaissance, this course will treat of the religious, political, and economic development of Europe since the beginning of the sixteenth century. Three hours throughout the year. *Mon., Wed., Fri.*, at 3.30. Assistant Professor PEAKE.

3. English History (55 B. C. - 1901 A. D.). The history of England from the invasion of Cæsar to the accession of Edward VII, with special emphasis upon the origin and growth of the constitution, the Reformation, the economic development of England and the expansion

of the British Empire. Three hours throughout the year. *Tu., Th., Sat.*, at 11.00. Assistant Professor PEAKE.

5. Mediæval History (350-1500 A. D.). Parallel with History 1. Three hours throughout the year. *Mon., Wed., Fri.*, at 5.40. Assistant Professor PEAKE.

10. American Political History. A general survey of the field of American history, designed as a preparation for specialized work, or for students having only a limited time to devote to the subject. Lectures, text-books, and reports on assigned readings. Throughout the year. *Tu., Th.*, at 2.30. Professor SWISHER.

15. Ancient History. The Eastern nations and Greece to the period of the Roman Conquest. *Mon., Fri.*, at 10. Mr. SCHOENFELD.

16. Roman History. The political history of Rome from the establishment of the Republic to the time of Constantine the Great. Two hours. In alternate years. Not given in 1908-09. Mr. SCHOENFELD.

Second Section. For Undergraduates and Graduates.

23. European History, 1815 to 1870. Text-book, lectures, and reports on collateral reading. Besides the history of Europe proper much attention is given to matters of larger European interest, especially to colonization and international relations with reference to South America, Asia, and Africa. First half-year, *Mon., Wed., Fri.*, 5.40 p. m. Assistant Professor MANNING.

24. European History, 1870 to the present. Continuation of the preceding, studying the most recent developments with special attention to the forms of government, political questions, and current issues. Second half-year. *Mon., Wed., Fri.*, 5.40 p. m. Assistant Professor MANNING.

25. English Constitutional History. In alternate years. Not given in 1909-10. Two hours throughout the year. Assistant Professor MANNING.

30. American Constitutional History. A history of the origin and development of the Federal Constitution of 1789, with a study of its interpretation under the pressure of party issues, extending through the periods of division and reunion. Lectures, text-books, and collateral reading. Throughout the year. *Mon., Fri.*, at 4.50. Professor SWISHER and Mr. CHURCHILL.

31. American History since the Civil War. A brief survey of the Civil War followed by a study of the conditions resulting therefrom up to the close of the nineteenth century. Lectures and assigned readings. Throughout the year. *Tu., Th.*, at 3.30. Professor SWISHER.

33. Current History. A discussion of political questions of the present time with special reference to their origin and historical signifi-

cance. Lectures and examinations. Throughout the year. *Wed.*, at 11.00. Professor SWISHER.

Third Section. Primarily for Graduates.

42. History of Party Government. The rise and development of the party system and the influence of party leaders and party issues in the United States, based on a study of political platforms and campaign literature. Throughout the year. *Mon., Fri.*, at 3.30. Professor SWISHER.

43. American Colonial History. A history of the development of representative government under the provincial charters, with a detailed study of the social, economic, and political conditions leading to the Revolution. Given in 1910-11.

44. Seminary Work. The results of individual research upon assigned topics, and reviews of recent political and historical publications by graduate students will be discussed at the weekly meetings of the seminary of American History. Professor SWISHER and Mr. CHURCHILL.

45. Seminary in European History. Assistant Professor MANNING.

HYDRAULIC ENGINEERING.

HENRY L. ABBOT, LL.D. Professor

Third Section. Primarily for Graduates.

40. Laws of flowing water, in natural channels, in pipes, and over weirs, with modes of measurement. Underground flow as sources of supply, with modes of estimation. Relation of rainfall to runoff. Regulation of river flow for purposes of navigation, and for protection against inundation. Slack-water navigation, including dams, canal locks, and waste weirs. Earth dams and river embankments, theory and modes of construction. Effect of forests upon water supply.

INTERNATIONAL LAW AND DIPLOMACY.

JAMES BROWN SCOTT, A.M., J.U.D. Professor
 ELLERY C. STOWELL, *Docteur en droit*. Instructor
 DAVID J. BREWER, LL.D. Lecturer
 JACKSON H. RALSTON, LL.B., LL.D. Lecturer

Second Section. For Undergraduates and Graduates.

20. Principles of International Law. A detailed course in the nature, sources, and sanctions of International Law, based upon the study of cases and reports, supplemented by lectures and assigned readings. Two hours throughout the year. First half-year. *Mon., Wed., Fri.*, 8 a. m. Second half-year *Mon., Wed.*, 8 a. m. Professor SCOTT.

21. The Elements of Diplomacy. A study of the genesis and organization of the Department of State; the diplomatic service; diplomatic usage; negotiation of treaties; methods and traditional principles of our foreign policy. First half-year. *Tu., Th.*, 8 a. m. Professor SCOTT.

22. The Consular Service. A general survey of the rise, development, organization of the consular service; consular conventions; the rights, duties, and methods of procedure of consular officers; comparative study of modern consular systems. Throughout the year. *Tu., Th., Sat.*, 8 a. m. (section a), 11 a. m. (section b), Dr. STOWELL.

[Mr. Osborne will take charge of this course during part of the second half-year and give instruction in the preparation of consular trade reports and the prevention of the undervaluation of merchandise imported into the United States.]

23. Arbitrations and Arbitral Procedure. The history and development of international arbitrations; a discussion of the formation of arbitral tribunals, the composition of the tribunal, the arbitral award, etc. Throughout the year. *Wed.*, 9 a. m. Mr. RALSTON and Dr. STOWELL.

24. International Unions and their Administration. The Telegraphic Union, the Postal Union and other organizations for international regulation of common interests. Two hours, second half-year. Not given in 1909-10. Dr. STOWELL.

25. History of European Diplomacy, 1648 to 1814. Lectures, with collateral readings, investigations, and reports. Three hours, first half-year. *Mon., Wed., Fri.*, at 9 a. m. Assistant Professor MANNING.

26. History of European Diplomacy, 1814 to the present. A continuation of the preceding. Three hours, second half-year *Mon., Wed., Fri.*, at 9.00 a. m. Assistant Professor MANNING.

27. European Diplomacy in the Eastern Question. Relations of the European Powers with reference to the decline of the Ottoman Empire in the last two centuries and the creation of the independent Balkan States. In alternate years; given in 1909-10. Two hours, first half-year. *Mon. and Fri.* at 3.30. Assistant Professor MANNING.

28. European Diplomacy in the Far East. After a rapid review of European colonization and conquest in Asia a study is made of the intercourse of Western nations with China and Japan, and of the relations of the powers with reference to the new problems of the Far East. In alternate years; given in 1909-10. Two hours, second half-year. *Mon. and Fri.* at 3.30. Assistant Professor MANNING.

29. History of American Diplomacy. A general history of American foreign relations from the Treaty with France in 1778, with a special study of some of the more important questions of American foreign policy. A research course with readings from treaties and diplomatic

correspondence. Throughout the year. *Mon., Fri.*, 2.30 p. m. Professor SWISHER.

MATHEMATICS.

HOWARD LINCOLN HODGKINS, Ph.D.....	Professor
PAUL NOBLE PECK, A.M.....	Assistant Professor
ASAPH HALL, JR., Ph.D.....	Professor
LOUIS COHEN, B.S.....	Assistant Professor

First Section. Primarily for Undergraduates.

2. Plane and Solid Geometry: Gore's Plane and Solid Geometry; *Tu., Th.*, at 5.40. Assistant Professor PECK.

3. Solid Geometry; Gore's Plane and Solid Geometry. *Mon., Wed., Fri.*, at 9, October and November. Assistant Professor PECK.

4. Algebra: Bowser's College Algebra. *Mon., Wed.*, at 4.50. Assistant Professor PECK.

5. Algebra: Bowser's College Algebra. *Mon., Wed., Fri.*, at 9, December to March. Assistant Professor PECK.

6. Solid Geometry: Gore's Plane and Solid Geometry. *Tu., Th., Sat.*, at 4.50, October and November. Assistant Professor PECK.

7. Plane Trigonometry: Gore's Plane and Spherical Trigonometry. *Mon., Wed., Fri.*, at 9, April and May. Assistant Professor PECK.

8. Algebra: Bowser's College Algebra. *Tu., Th., Sat.*, at 4.50, December to March. Assistant Professor PECK.

9. Trigonometry: Gore's Plane and Spherical Trigonometry. *Mon., Wed., Fri.*, at 10; October to December. Professor HODGKINS.

10. Plane Trigonometry. Gore's Plane and Spherical Trigonometry. *Tu., Th., Sat.*, at 4.50, April and May. Assistant Professor PECK.

11. Analytic Geometry: Nichols' Analytic Geometry. *Mon., Wed., Fri.*, at 10, January to May. Professor HODGKINS.

12. Trigonometry: Gore's Plane and Spherical Trigonometry. *Mon., Wed., Fri.*, at 5.40, October to December. Professor HODGKINS and Assistant Professor PECK.

14. Analytic Geometry: Plane and Solid; Nichols' Analytic Geometry. *Mon., Wed., Fri.*, at 5.40, January to May. Professor HODGKINS and Assistant Professor PECK.

NOTE—Courses 2 and 4 are intended for students who desire to review some parts of elementary algebra and plane geometry, in order to obtain that thorough and ready knowledge of these fundamental mathematical studies that is necessary for their proper use in other subjects. These classes are not intended for beginners, and only students who have studied elementary algebra and plane geometry are admitted.

Second Section. For Undergraduates and Graduates.

20. Differential and Integral Calculus: *Mon., Wed., Fri.*, at 4.50. Professor HODGKINS.

21. Differential and Integral Calculus: *Mon., Wed., Fri.*, at 9. Professor HODGKINS.

Third Section. Primarily for Graduates.

40. Differential Equations. Professor HODGKINS.

41. Theory of Equations. Professor HODGKINS.

47. Thermodynamics and Fourier's Series. Assistant Professor COHEN.

48. Celestial Mechanics. Theory of central forces; theory of parabolic and elliptic orbits. Lectures, with reading from the works of Gauss, Oppolzer and Moulton. Professor HALL.

PHILOSOPHY, PSYCHOLOGY, AND EDUCATION.

WILLISTON S. HOUGH, Ph.M.....Professor

GEORGE LANSING RAYMOND, L.H.D.....Professor

SHEPHERD IVORY FRANZ, Ph.D.....Professor

WILLIAM CARL RUEDIGER, Ph.D.....Assistant Professor

ELMER ELLSWORTH BROWN, Ph.D.....Lecturer

GEORGE EDMUND MYERS, Ph.D.....Lecturer

WILLARD S. SMALL, Ph.D.....Lecturer

STEPHEN ELLIOTT KRAMER, A.M.....Lecturer

PHILOSOPHY.*First Section. Primarily for Undergraduates.*

1. The Elements of Logic. This course is introductory to the remaining courses in Philosophy, and will include, in addition to the elements of Formal Logic, a study of the structure of knowledge, and of the functions of concepts in both theoretical and practical life. Text-book, with lectures. *Mon., Wed., Fri.*, at 9.00. First half-year. Professor HOUGH and Mr. JOHNSON.

2. Ethics, or the Moral Value of Conduct. The principal subjects considered will be: The growth of morality; the origin and authority of moral standards; the theories of the moral end; the nature of conscience; the system of the virtues; and the social aspects of morality. Text-book, with lectures. Second half-year. *Mon., Wed., Fri.*, at 9.00. Professor HOUGH and Mr. JOHNSON.

Courses 1 and 2 should be taken in sequence.

Second Section. For Undergraduates and Graduates.

20. History of Philosophy. The evolution of philosophic thought with special reference to the interpretation of human life. Eucken's

"The Problem of Human Life," with lectures. *Tu., Th.*, at 10.00. Professor HOUGH.

21. History of Philosophy. (Parallel with Course 20). *Tu., Th.*, at 4.50. Professor HOUGH and Mr. JOHNSON.

26. *Æsthetics*. Lectures on *æsthetic* theories, considered historically and philosophically, and their results as manifested in the different arts. First half-year. *Wed.*, at 4.50. Professor RAYMOND.

Third Section. Primarily for Graduates.

40. Elements of Metaphysics. Selected fundamental problems. Designed for graduates taking a major in Philosophy. One hour. Professor HOUGH.

46. *Æsthetics*. Seminary course. *Æsthetics*, considered philosophically, historically, and practically. Conferences, prescribed readings, and thesis. Professor RAYMOND.

PSYCHOLOGY.

Course 1 or Course 2 must precede all Second Section courses in Psychology. Students intending to pursue advanced courses in Psychology, or courses in Education, are recommended to take Course 1 (or Course 2) in their Sophomore year.

First Section. Primarily for Undergraduates.

1. General Psychology. This course is designed as a comprehensive introduction to the principles and methods of scientific psychology. Text-book, lectures, and reference-work. *Mon., Wed., Fri.*, at 10.00. Professor HOUGH.

2. General Psychology. (Parallel with Course 1.) Designed specially for teachers. *Tu., Th.*, at 3.30. Professor HOUGH.

3. Elements of Psychology. An introductory course presenting an outline of the main facts about the mind. Designed for first-year students, for special students, and for teachers who are unable to take a longer course. Lectures, with assigned reading. *Th.*, at 4.50. Given in 1908-09; not given in 1909-10. Professor HOUGH.

(Courses 41 and 42 will be given in the psychological laboratory of the Government Hospital for the Insane, which is specially well equipped for psychological teaching and research.)

Educational Psychology. (See Course 41 under "Education.")

Second Section. For Undergraduates and Graduates.

20. Comparative Psychology. The evolution of mind in the animal series and in man, including reference to the contributions of race psychology and abnormal psychology. Text-book, lectures, and reports

upon assigned reading. *Tu., Th.*, at 10. Given in 1908-09; not given in 1909-10. Professor HOUGH.

23. Experimental Psychology. An introductory laboratory course. Experiments on sensation, movement, effects of practice, fatigue, attention, memory, association, emotional manifestations, etc. Two two-hour periods. Hours to be arranged. Assistant Professor RUEDIGER.

24. Abnormal Psychology. A course in which variations from normal mental processes and their bearing upon problems of normal psychology are discussed. The topics considered are adapted to the needs of the students electing the course. During the year 1908-09 the subject of the course was feeble-mindedness and delinquency. Lectures, demonstrations, and assigned readings. One two-hour period each week. Professor FRANZ.

(This course will be given at the Government Hospital for the Insane.)

Third Section. Primarily for Graduates.

40. The Principles of Psychology. A seminar course for the advanced study of fundamental problems. Designed for graduates taking a major or minor in Psychology. Open to undergraduates who obtain the permission of the instructor. *Mon.*, 4.30 to 6. Counts as two hours. Professor HOUGH.

41. Experimental Psychology. A laboratory course, treating special topics in psychology, such as memory, time of mental processes, movement, sensation, emotion, abnormal psychology, and physiological psychology. The topics selected for consideration in any year will be determined by the need of the students electing the course. Open only to students who have taken or are taking the course in general psychology, and the introductory course in experimental psychology, or their equivalents. Hours to be arranged. Professor FRANZ.

42. Experimental Psychology. A research course. Open only to students who have taken Courses 23 and 41, or their equivalents. Students will take up topics for original investigation in some field of experimental, physiological, comparative, or pathological psychology. Hours to be arranged. Professor FRANZ.

EDUCATION.

Course 1 in Psychology must precede, or be taken parallel with, the first course in Education, but normal school graduates, and teachers of experience, may satisfy this requirement by taking Course 2 in Psychology either before or in conjunction with their first course in Education. Students may begin their work in Education with either the Principles and Psychology of Education (Course 20 or 21), or the History of Education (Course 22); but one or the other must precede, or be taken parallel with, all other courses in Education. Candidates

for the Teacher's Diploma are required to complete before graduation Courses 20 or 21, 22, 23 or 24, 27 or 30, and 31. Students who are permitted to substitute Course 21 for Course 20 may also substitute an elective, counting 2 units, for Course 31.

Second Section. For Undergraduates and Graduates.

20a. Principles of Education. The bases, aims and values of education as revealed by biological, psychological, sociological and ethical principles. First half-year. *Mon., Wed., Fri.*, at 9.00. Assistant Professor RUEDIGER.

20b. Educational Psychology or Principles of Teaching. The fundamental principles underlying the teaching process as revealed by psychology and logic. Second half-year. *Mon., Wed., Fri.*, at 9.00. Assistant Professor RUEDIGER.

21. The Principles and Psychology of Education. (Parallel with Course 20.) Designed for normal school graduates and for teachers in service. *Tu., Th.*, at 4.50. Assistant Professor RUEDIGER.

22. History of Education. The contributions of Plato, Aristotle, Bacon, Comenius, Locke, Rousseau, Pestalozzi, Froebel, Spencer, Hall, Dewey, and others. A general course, based on Monroe's *Brief Course in the History of Education*, and supplemented by lectures, assigned reading, and reports. *Sat.*, 10 to 12. Dr. MYERS.

23. Child Study. The psychology, physiology, and hygiene of childhood and adolescence with special reference to the problems of teaching. Kirkpatrick's *Fundamentals of Child Study*, supplemented by lectures, assigned reading and reports. *Sat.*, 10 to 11. Dr. SMALL.

24. School Sanitation and Hygiene. A survey of the relations of education and health, including: The function of the school in promoting health; physical examination of children; medical inspection; physical education; diseases and defects incident to school life; the organization of instruction as related to fatigue; defective children; schoolhouse construction and sanitation. Lectures, reference work, and reports. *Sat.*, 11 to 12. Dr. SMALL.

25. Secondary Education. This course considers the history, nature and function of secondary education, foreign secondary education, recent tendencies, adolescence, courses of study, and the educational value, essential content, and methods of presentation of the high school branches. *Mon., Fri.*, at 3.50. Assistant Professor RUEDIGER.

26. Elementary Education. The application of the principles of education and psychology to the elementary school; modern subjects and recent tendencies. The major portion of the time will be devoted to a discussion of the aims and methods pertaining to the elementary school subjects. Lectures, assigned readings, and reports. *Wed.*, at 3.50. Assistant Professor RUEDIGER.

27. School Administration. A general course including consideration of the different types of school control and support; political and administrative elements in the conduct of schools; relative functions of school board, superintendent and teachers; the budget; school buildings; grading; examinations; promotions; curricula; compulsory education and child labor; and extension of the work of schools. Lectures, assigned readings, reports, and discussions. *Wed.*, at 4.50. Given in 1908-09; not given in 1909-10. Dr. UPDEGRAFF.

28. Educational Theory. Five lectures comprising an introduction to the chief divisions of a general theory of education, and ten lectures on the principal epochs in the development of educational theory. *Fri.*, at 4.50. First half-year. First five lectures, Commissioner BROWN. Ten lectures, Professor HOUGH.

29. Industrial education. Definition of technical, manual, industrial and trade training, and their inter-relations. Brief historical survey of the industrial aspects of primitive, oriental, Greek, Roman, and Mediæval education. Full discussion of the present status of industrial training in Germany, France, England, and America. Present tendencies, problems and dangers. Lectures, assigned readings and reports. *Mo.*, at 4.50. Given 1908-09; not given 1909-10. Dr. MYERS.

30a. Class Management. A consideration of the practical problems of the classroom, including economy in class management, attendance, discipline, physical conditions, the daily program, and the technique of class instruction. Class discussions, lectures, and assigned readings. *Wed.*, 4.50. First half-year. Mr. KRAMER.

30b. School Supervision. A course involving the study of the relations of teachers to supervising officers, the principles of helpful criticism, the testing of class work, the conducting of teachers' meetings, and the rating of teachers. Class discussions, lectures, and assigned readings. *Wed.*, 4.50. Second half-year. Mr. KRAMER.

31a. Observation. Both the application of general educational principles and the methods of teaching particular subjects are systematically observed and discussed. First half-year. Two hours. Hours to be arranged. Assistant Professor RUEDIGER.

31b. Practice. The student-teacher is led in particular to form the connection between theory and practice and to establish right teaching habits. Second half-year. Two hours. Hours to be arranged. Assistant Professor RUEDIGER.

(Course 31 is open only to students registered in Teachers College, or to graduates taking a major or minor in Education.)

32. Adolescence. A consideration of the psychology of adolescence with special reference to the problems of secondary education. Lectures, readings, and special topics. One hour. (Not offered in 1909-10.) Dr. SMALL.

33. Foreign School Systems. A study of the school systems of Germany, England, and France, with a consideration of their bearing upon education in the United States. Lectures, assigned reading and discussions. Two hours. Second half-year. Not given in 1909-10.

Third Section. Primarily for Graduates.

40. Educational Theory. A research course in the history of educational doctrines with special reference to the development of philosophic thought and of general culture. Designed as an aid in the preparation and criticism of thesis material. Two hours. Professor HOUGH.

41. Research in Educational Psychology. Methods of investigation, followed by a review of typical studies. Texts: Thorndike's *Mental and Social Measurements*, monographs and periodical literature. Two hours. Hours to be arranged. Assistant Professor RUEDIGER.

PHYSICS.

EDWARD B. ROSA, Ph.D.....	Professor
EDGAR BUCKINGHAM, Ph.D.....	Lecturer
PERLEY G. NUTTING, Ph.D.....	Assistant Professor
EVERETT W. VARNEY, A.B.....	Instructor
.....	Instructor

First Section. Primarily for Undergraduates.

1. General Physics. A recitation and lecture course, embracing the fundamental principles of mechanics, sound, heat, light, and electricity. The lectures are illustrated by experiments. This is a required course for Sophomores in Engineering, and may be elected by the general student who has had a college course in trigonometry. *Mon., Wed., Fri.,* at 4.50.

2. Laboratory Physics. A selected series of experiments, mainly quantitative. Two two-hour periods. *Tu., Th.,* at 10.

3. Introductory General Physics. A lecture and recitation course, similar to Course 1, but less mathematical, and planned with reference to the needs of the general student. *Mon., Wed., Fri.,* at 1.30.

Second Section. For Undergraduates and Graduates.

21. Heat. A lecture and laboratory course, based on Preston's Theory of Heat and Poynting and Thomson's Heat. Three periods. *Mon., Wed., Fri.,* at 5.40.

22. Light. A lecture and laboratory course, based on Preston's Theory of Light and Schuster's Theory of Optics. Three periods. *Mon., Wed., Fri.,* at 11.

Third Section. Primarily for Graduates.

40. Light. Advanced study, experimental and mathematical, of some one branch of the subject.

41. Absolute Electrical Measurements. A course of lectures on the theory and practice of fundamental electrical measurements, including the more important methods for the measurement of resistance in absolute units, the absolute measurement of current and electromotive force, the determination of the ratio of the two systems of electrical units, the theory of various forms of condensers, the calculation of inductances from their dimensions, the experimental determination of capacities and inductances, and other important problems in electrical measurements. A brief history of the present electrical units and an account of the classical investigations by which their values have been determined will also be given. Professor ROSA.

42. Advanced Laboratory Work in Electrical Measurements. A course in advanced laboratory work in electrical measurements, for those who are qualified to undertake it. This may include a considerable range of work, or it may be research work on some important single subject. The amount and character of the work and the time and place at which it shall be done will be determined for each case separately. Professor ROSA.

43. Thermodynamics. An introduction to the general principles of the subject will be followed by applications to Physics and Physical Chemistry. Students should be familiar with Preston's "Theory of Heat" up to Thermodynamics, or with its equivalent. The course will be conducted by lectures with collateral reading. Dr. BUCKINGHAM.

44. Theory of Electricity. The course will be conducted by lectures with collateral reading in Maxwell, Heaviside, and Gray. Students must have had at least two years' training in Calculus, and be familiar with the ordinary phenomena of electrodynamics. Dr. BUCKINGHAM.

45. Spectroscopy. An experimental study of the flame, arc, spark, and vacuum tube spectra of the chemical elements; variations in spectra produced by varying excitation; spectra of mixed gases and alloys; identification of elements; photography of spectra. Assistant Professor NUTTING.

POLITICAL SCIENCE.

HOWARD LEE MCBAIN, Ph.D.....	Assistant Professor
ERNEST G. LORENZEN.....	Professor
JOHN M. HARLAN, LL.D.....	Lecturer
ALPHEUS H. SNOW, A.B., LL.B.....	Lecturer
PAUL CHARLTON	Lecturer
JACKSON H. RALSTON, LL.B., LL.D.....	Lecturer
.....	Instructor

Second Section. For Undergraduates and Graduates.

20. The American Governmental System. An introductory course for the study of federal government in the United States, discussing the fundamental nature of the union and the relation of the national government to the States, the territories, and the outlying possessions. First half-year. *Mon., Wed., Fri.*, 4.50 p. m. Assistant Professor MCBAIN.

21. Actual American Government. A continuation of the preceding course, with emphasis upon the actual organization and operation of the national government. A study of Congress and the executive departments in action, and of the organization and control of political parties. Second half-year. *Mon., Wed., Fri.*, 4.50 p. m. Assistant Professor MCBAIN.

22. Comparative State Government in the United States. A comparative study of the constitutions of the States of the American Union; a study of the powers, organization, and operation of State governments; the problem of local government in the United States; modern tendencies toward centralization of administration in the States. First half-year. *Tu., Th., Sat.*, 10 a. m. ——— ———.

23. Municipal Government in the United States. A study of the organization and administration of city government in the United States with some comparative study of European conditions. The growth of cities; development of the legal position of the city; powers and liabilities of municipal corporations; municipal problems, such as those relating to local transportation, police, light and water supply, charities, education, municipal ownership of public utilities. First half-year. *Mon., Wed., Fri.*, 11 a. m. Assistant Professor MCBAIN.

24. Municipal Government in Europe. The legal position of the European city; its powers and liabilities; governmental organization and methods of administration; municipal problems in Europe and how they have been met; municipal ownership. Second half-year. *Mon., Wed., Fri.*, 11 a. m. ——— ———.

25. The Elements of Political Science. The origin, nature, and functions of the State; the fundamental political concepts such as the State, sovereignty, government, law, civil liberty; the forms of State; the forms of government; modern political theories. Two hours, first half-year. *Thu.*, 4.50 to 6.30 p. m. Assistant Professor MCBAIN.

26. American Political Theories. A course discussing the development of American political ideas. Political theories of the colonial, the revolutionary, and the formative periods; the growth of democratic ideas; political theories of the slavery and Civil War controversies; modern political theories in America. First half-year. *Mon., Fri.*, 11 a. m. ——— ———.

27. American Constitutional Law. An outline of the principles of the Federal Constitution as established and developed by judicial interpretation. Throughout the year. *Mon., Fri.*, 4.50 p. m. Mr. JUSTICE HARLAN.

28. Comparative Constitutional Law. A comparative study of the constitutions and governmental forms of the United States, Great Britain, France, Germany, and Switzerland as representing types of modern constitutional governments; some comparison these types with constitutional forms in other States. Two hours, second half-year. *Thu.*, 4.50 to 6.30. Assistant Professor MCBAIN.

Third Section. For Graduates.

40. Administrative Law. A study of the organization of national and State administrative systems and of the law governing official relations. First half-year. *Mon., Wed.*, 9 a. m. ————.

41. Private Rights and Immunities under the Constitution. An advanced course in Constitutional Law—a study of cases showing the development of federal protection of private rights and immunities as against the powers of the States. Remedies against the powers of the States; limitations on the powers of the States to deprive persons of life and liberty, to define and regulate the uses of property, to impose taxes, to impair the obligation of contracts, etc. Two hours, second half-year. *Tu.*, 4.50 to 6.30 p. m. Assistant Professor MCBAIN.

42. Colonial Government and Administration. A study of the past and present colonial systems of the world. Colonial institutions and methods of legislation; administration of finance, commerce, industrial development, labor, education in the colonies. The organization and administration of the insular possessions of the United States. First half-year. *Tu.*, 9 a. m. Mr. SNOW. Second half-year. *Tu., Th.*, 9 a. m. Mr. CHARLTON.

43. Roman Law. A comparison of some of the fundamental conceptions of the law of Rome and of the modern Civil Law with those of the Roman Law. Open only to students who have had instruction in American Law. Two hours, first half-year. (Hours to be announced on Law Schedule.) Professor LORENZEN.

44. Conflict of Laws or Private International Law. A course dealing with private law in its international aspects. Among the topics treated are marriage and divorce, guardianship, wills and the administration of estates, bankruptcy, and foreign judgments. Open only to students who have had instruction in the fundamental subjects of American Law. Four hours, second half-year. (Hours to be announced on Law Schedule.) Professor LORENZEN.

45. Spanish-American Law. Giving an outline of the legal systems prevailing in Central and South America, in Cuba, Porto Rico, and the

Philippine Islands, with emphasis upon their private laws, both civil and commercial, and their system of procedure. Open only to students who have had instruction in Roman law. Lectures, assigned reading, and reports. Two hours, second half-year. (Hours to be announced on Law Schedule.) Professor LORENZEN.

46. Seminar in Political Science. Students competent to undertake advanced work along special lines are admitted to this Seminar for the presentation and discussion of essays on topics belonging to the field of political science proper. Assistant Professor MCBAIN.

PREVENTIVE MEDICINE.

GEORGE M. STERNBERG, M.D., LL.D. Professor

Third Section. Primarily for Graduates.

40. Food preservatives in relation to the Public Health. The hygienic results of milk sterilization. The hygienic results of filtration of municipal water supplies. The use of chemical agents for the sterilization of water supplies, municipal or domestic. The results of legislative and philanthropic efforts to arrest the progress of tuberculosis in the United States, and especially in the principal cities.

ROMANCE LANGUAGES AND LITERATURES.

GEORGE N. HENNING, A.M. Professor

WILLIAM WEBB SNIFFIN, A.M. Assistant

FRENCH.

First Section. Primarily for Undergraduates.

1. Grammar, composition, drill in pronunciation. Fraser and Squair's French Grammar. Translation and reading of nineteenth century fiction and history. (400-500 pages.) For beginners. *Mon., Wed., Fri.*, at 10.00. Professor HENNING.

2. Parallel with Course 1. *Tu., Th., Sat.*, at 5.40. Mr. SNIFFIN.

3. Translation, reading, grammar, composition Fraser and Squair's French Grammar. Mérimée, *Colomba*; other texts to be announced. Open to students who have passed in French 1 or 2, or have fulfilled the admission requirements in Elementary French. *Mon., Wed., Fri.*, at 11. Professor HENNING.

4. Parallel with Course 3. *Tu., Th., Sat.*, at 4.50. Mr. SNIFFIN.

6. General survey of French literature, seventeenth to nineteenth centuries. Translation, collateral reading and reports thereon, lectures on literature and the history of the language, composition. Warren's French Prose of the Seventeenth Century, Canfield's French Lyrics, Lacombe's *Petite Histoire du peuple français*, Cran's *la Société fran-*

çaise au XVII^e siècle, Corneille, Molière, La Fontaine, Racine, Saint-Simon, Montesquieu, Marivaux, Voltaire, Rousseau, Beaumarchais, Hugo, Musset, Michelet, Balzac, Augier, Maupassant, Pailleron, A. French, Bornier, Daudet. Open to students who have passed in Course 3 or 4, or have fulfilled the admission requirements in Advanced French. *Mon., Wed., Fri.*, at 2.30. Professor HENNING.

Second Section. For Undergraduates and Graduates.

Courses in this group are open to students who have passed in Course 6, or who otherwise satisfy the instructor of their fitness to take them.

21. Seventeenth century literature; history, philosophy, criticism, memoirs, letters, eloquence, drama, fiction, poetry. Balzac, Descartes, Pascal, La Rochefoucauld, La Bruyère, Boileau, Saint-Simon, Mme. de Sévigné, Bossuet, Corneille, Racine, Molière, Fénelon, Malherbe, La Fontaine, etc. Translation, collateral reading and reports thereon, lectures on literature and history. Thesis. Not given in 1909-10.

23. Eighteenth century literature; history, philosophy, criticism, letters, drama, fiction, poetry. Montesquieu, Diderot, Rousseau, Voltaire, Marivaux, Destouches, Sedaine, Beaumarchais, Bernardin de St. Pierre, André Chénier, etc. Translation, collateral reading and reports thereon, lectures on literature and history. Thesis.

25. Nineteenth century literature; history, philosophy, criticism, memoirs, travels, fiction, drama, lyric poetry. Thierry, Michelet, Mignet, Thiers, Taine, Saint-Beuve, Brunetière, France Lemaître, Renan, Gautier, Mme. de Staël, Chateaubriand, Hugo, George Sand, Mérimée, Balzac, Flaubert, Daudet, Maupassant, Loti, Musset, Dumas fils, Augier, Maeterlinck, Rostand, Lamartine, Vigny, the Romantic poets, the Parnassians, the Symbolists, etc. Translations, collateral reading and reports thereon, lectures on literature and history. Thesis. *Mon., Wed., Fri.*, 1.30. Professor HENNING.

Third Section. Primarily for Graduates.

43. Old French and philology. Darmesteter's Historical French Grammar. La Chanson de Roland, etc. Professor HENNING.

47. The comedies of Molière. Professor HENNING.

50. The Romantic Movement in France with some reference to the same movement in England and Germany. Professor HENNING.

Other courses may be arranged for competent graduates.

SPANISH.

First Section. Primarily for Undergraduates.

1. Grammar, composition. Hills and Ford's Spanish Grammar. Translations and reading of nineteenth century fiction and drama. Open

to first-year students only by permission of the instructor. Open only to students who have had at least one year of French or Latin. Students may not elect Spanish and Italian in the same year. *Tu., Th., Sat.* at 10. Professor HENNING.

Second Section. For Undergraduates and Graduates.

20. Translation and reading of nineteenth and seventeenth century works; history, fiction, drama, lyric poetry. Lectures on literature and history. Open to students who have passed in Course 1 with at least the grade of C, or who otherwise satisfy the instructor of their fitness to take the course. Not given in 1909-10. Two hours.

ITALIAN.

First Section. Primarily for Undergraduates.

1. Grammar, composition. Grandgent's Italian Grammar, Bowen's Italian Reader. Translation and reading of nineteenth century fiction and drama. Open to first-year students only by permission of the instructor. Open only to students who have had at least one year of French or Latin. Students may not elect Italian and Spanish in the same year. Not given in 1909-10.

FEES.

ARTS AND SCIENCES.

1. Matriculation fee (payable once).....	\$5
2. Annual library fee.....	2
3. Tuition fee per annum for graduate courses leading to the degrees of M.A., M.S., C.E., E.E., M.E., Jur.D., and Ph.D.	150
Where candidates for higher degrees exceed the minimum time limit they may be liable for an additional charge of \$40 per annum for each topic pursued by them.	
4. Tuition fee per annum for each hour per week of undergraduate courses leading to the degrees of B.A. and B.S., and for graduate courses leading to the degree of M.Dip.....	10
5. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, except for courses which do not begin with the terms	2
6. Tuition fee for each year of the regular four-year courses in the College of Engineering.....	150

7. Laboratory courses:
 Material fees:
- | | |
|---|----|
| Mineralogy | 5 |
| Chemistry 2, 3, and 7; Electrical Engineering; Physics,
each | 10 |
| Chemistry, 4 (Assaying) | 20 |
| Chemistry, except 2, 3, 4 and 7, each | 25 |
| Deposits to cover breakage of apparatus issued, the amounts
paid in excess of breakage to be returned: | |
| Chemistry, 2, 3, and 7, each | 10 |
| Chemistry, except 2, 3, 4, and 7, each | 25 |
| 8. Fee for graduation | 10 |
| 9. Tuition fee for each of the following special courses, not
taken by candidates for a degree | 40 |
| Architecture, Courses 37 and 38. | |
| Chemistry, Course 4 (Assaying). | |
| 10. In determining tuition fees, four hours of laboratory work in
Architecture, three hours of laboratory work in Chem-
istry, and two hours of laboratory work in other subjects
count as one hour. | |
| 11. Fee for a certificate under the seal of the University | 2 |

No change will be made in the fees fixed at the time of registration except in the case of a change in or withdrawal from a course of study, and then only upon notice in due form and from the end of the current quarter session when such change or withdrawal shall be approved. Applications for permission to change a course of studies or for the granting of a withdrawal should be made on the prescribed form to be obtained from the Secretary and will be received only at the end of a quarter session.

PAYMENT OF FEES.

All fees are to be paid to the Treasurer. Tuition fees are payable quarterly in advance. Matriculation, library, and laboratory fees are payable in full in advance.

BOARD AND ROOMS.

A register of approved boarding houses is kept by the Treasurer. Accommodations cost from \$25 to \$40 a month. Board and rooms for woman students are offered in the Woman's Building at \$30 to \$35 per month. Woman students may apply to the Dean of Women.

HONORABLE DISMISSION.

An honorable dismission will always be issued to any student who has been granted a withdrawal from the University in good standing.

For catalogues, application blanks, and further information, address

THE SECRETARY,
The George Washington University,
Washington, D. C.

Professional Departments.

DEPARTMENT OF LAW.

FACULTY.

CHARLES WILLIS NEEDHAM, LL.D.....	PRESIDENT OF THE UNIVERSITY
WILLIAM REYNOLDS VANCE, Ph.D., LL.B.....	Professor of Law, Dean
JOHN M. HARLAN, LL.D.....	Professor of Law
MELVILLE CHURCH, LL.M.....	Professor of the Law of Patents
WALTER C. CLEPHANE, LL.M.....	Professor of Law
EDWIN C. BRANDENBURG, LL.M.....	Professor of Law
ARTHUR PETER, LL.M.....	Professor of Law
†HENRY P. BLAIR, LL.M.....	Professor of Law
STANTON J. PEELE, LL.D.....	Professor of Law
JOHN PAUL EARNEST, A.M., LL.M.....	Professor of Law
ERNEST G. LORENZEN, Ph.B., LL.B., J.U.D.....	Professor of Law
JAMES BROWN SCOTT, M.A., J.U.D.....	Professor of Law
EDWARD SAMPSON THURSTON, A.M., LL.B.....	Professor of Law
WENDELL PHILLIPS STAFFORD, LL.D.....	Professor of Law
JOSIAH A. VAN ORSDEL, LL.D.....	Professor of Law
JULIEN CHARLES MONNET, M.A., LL.B.....	Professor of Law
JOHN WILMER LATIMER, LL.B.....	Instructor in Practice
ALFRED BUHRMAN	Clerk of the Moot Court
HARRY C. DAVIS.....	Secretary

COURT OF APPEALS.

WILLIAM F. MATTINGLY, LL.D.....	Chief Justice
JOHN B. LARNER, LL.D.....	Associate Justice
A. A. HOEHLING, JR., LL.M.....	Associate Justice

GENERAL STATEMENT.

This Department, established in 1865, is the oldest school of law in the city of Washington. Its course of instruction for the degree of Bachelor of Laws, originally requiring but two years, was gradually expanded, until, in 1898, in accordance with the recommendation of the American Bar Association, it was increased to three years. The Faculty has also shown a gradual increase in numbers commensurate with the expansion of the course and the growing number of students in attendance. Beginning with 1903, the Board of Trustees adopted the

† Absent on leave.

policy of placing most of the important topics of substantive law under the charge of trained professional teachers giving their whole time to the work of legal instruction. Of these there are now five. Those branches of the law connected with practice will continue to be under the charge of professors who are actively engaged in the administration of the law either at the Bar, or on the Bench.

In 1877 a year of graduate work, leading to the degree of Master of Laws, was added to the course of instruction offered, and in 1905 a special graduate course of three years, leading to the degree of Doctor of Jurisprudence, was established. Work for this degree is now carried on by members of the Law Faculty under the general direction of the University Faculty of Graduate Studies. A special course in Patent Law was added in 1895.

In June, 1898, an ordinance was adopted by the Board of Trustees formally establishing as a separate department of the University the Department of Jurisprudence and Diplomacy. This Department was opened on November 15, 1898.

In 1904, by the authority of the Board of Trustees, a new adjustment of graduate work in the University was made, resulting in the establishment of the Departments of Law and of Politics and Diplomacy (now called the College of the Political Sciences), the former embracing the undergraduate course in municipal law and graduate courses in the broader fields of general law, and the latter graduate and undergraduate courses in the political sciences, special attention being given to diplomacy.

SEPARATE COURSES FOR ALL-DAY AND AFTERNOON STUDENTS.

Since 1903 the work of the Law School has gradually been transferred from the late afternoon hours to the forenoon, and at the present time the lectures offered to all-day students are largely confined to the earlier part of the day. To these students is offered a course consisting of fourteen hours a week for three years, leading to the degree of Bachelor of Laws (LL.B.).

To meet the needs of those students whose employment in the Government service, or elsewhere, prevents their attendance before 4.30 in the afternoon, an afternoon course is given, consisting of ten hours a week for three years and leading to the degree of Bachelor of Law (B.L.). This course offered to afternoon students satisfies the requirements of the Association of American Law Schools, of which this school is a member.*

* This distinction between the degrees of LL.B. and B.L. is in accordance with the recommendation of the Committee on Legal Education of the American Bar Association. See Vol. 31, Reports American Bar Association (1907) p. 514.

Students who have received the degree of B.L. may, upon completing a fourth year of twelve hours a week in the afternoon, receive the degree of LL.B.

LOCATION.

All classes in the Department of Law are held in the Law Building, situated on H street, adjoining the main University building, at the corner of Fifteenth street. This hall, dedicated on January 3, 1899, was especially designed for the work of this Department. It is commodious and well equipped with lecture-rooms, Moot Court rooms and offices, and contains the law library, with a conference-room adjoining.

ACADEMIC YEAR.

The academic year extends through more than eight months, beginning on the last Wednesday in September and ending on the second Wednesday in June, and is divided into two half-years, the second half-year beginning on the first day of February. The session of 1909-10 begins on Wednesday, September 29, and closes Wednesday, June 8. Since most of the courses given during the first half-year are completed before the beginning of the second half-year, it is possible for a student to enter on the 1st of February of any year and be graduated three years from that date, receiving his degree at the Winter Convocation, held on February 22, of each year.

Lectures begin promptly on the first day of the term, and students applying for admission at a later day will be admitted only upon showing good cause for the delay and by special action of the Faculty.

ADMISSION.

I. FOR THE DEGREE OF BACHELOR OF LAWS (LL.B.).

Applicants for admission as candidates for the degree of Bachelor of Laws must be at least eighteen years of age and must have had educational training sufficient to satisfy the entrance requirements of the Department of Arts and Sciences of the University. In order to satisfy these requirements, which are set out at length in the General Catalogue of the University, students must present credits aggregating 15 units, which are broadly equivalent to a four years' high school course. Applicants for admission on certificate should secure formal certificates setting forth the credits claimed, and present these certificates attached to their application forms. All applications for admission should be addressed to the Secretary of the University, who will, upon request, furnish proper blanks and detailed information as to entrance examinations.

Advanced Requirements. The requirement of two years of college work for admission to regular standing, heretofore announced to take

effect at the opening of the session 1909-1910, is postponed until such time as shall hereafter be fixed by the Law Faculty.*

2. FOR THE DEGREE OF BACHELOR OF LAW (B.L.).

Applicants for admission as candidates for this degree must satisfy the same requirements as those demanded of candidates for the LL.B. degree.

3. FOR THE DEGREE OF MASTER OF LAWS.

Candidates for the degree of Master of Laws must be at least twenty-one years of age and hold the degree of Bachelor of Laws from an institution substantially complying with the requirements of the Association of American Law Schools, of which this school is a member.

4. FOR THE DEGREE OF MASTER OF PATENT LAW.

Only those students who are graduates of an approved law school or members of the bar in good standing will be admitted as candidates for the degree of Master of Patent Law.

5. FOR THE DEGREE OF DOCTOR OF JURISPRUDENCE.

No student will be admitted as a candidate for the degree of Doctor of Jurisprudence unless he shall hold a baccalaureate degree conferred by some institution of approved standing after the completion of a liberal course of undergraduate academic study, and possess a reading knowledge of Latin, French, and German. At the discretion of the Faculty, however, other languages may be substituted when the character of the work undertaken is such as to warrant it. The right is reserved to the Faculty of Graduate Studies to decide in all cases whether the applicant has given sufficient evidence that his antecedent training fulfils these requirements. In addition, the candidate must hold the degree of Bachelor of Laws from this University or from some other institution requiring equivalent work as a prerequisite to that degree.

6. SPECIAL STUDENTS.

Persons who for any reason do not qualify as candidates for a degree may, on the recommendation of the Faculty and with the assent of the professors whose courses they elect to take, be admitted as special students.

* During the past four years the amount of work required for a degree has been increased, methods of instruction have been changed, and the standard of work exacted in the class-room and upon examination has been raised. The recovery of the Law School from the losses consequent upon these changes has been slower than was anticipated, upon which account it is deemed advisable to postpone putting the advanced requirement into effect. The Faculty and Board of Trustees have not relinquished their determination to put in force this requirement at the earliest practicable date.

ADVANCED STANDING.

Students may be admitted to advanced standing in the second or third year classes upon satisfying the requirements for the work of the preceding year or years. These requirements may be met by presenting certificates from other law schools of accredited standing showing that the student has successfully completed equivalent courses, or by passing the regular examinations set for that purpose at the beginning of the term, after the student has shown that he has pursued a course of study in the subjects upon which he is examined, covering at least as many hours as are required for such subjects in this University.

All examinations that may be required of applicants for advanced standing are held during the first week of each session.

HOURS FOR LECTURES.

In the all-day course, leading to the degree of Bachelor of Laws (LL.B.), the greater part of the instruction is given between the hours of 9.00 a. m. and 1.00 p. m.

In the afternoon course, leading to the degree of Bachelor of Law (B.L.), instruction is given between the hours of 4.50 and 6.30 in the afternoon.

Instruction in the fourth year's work required of holders of the degree of Bachelor of Law (B.L.) to obtain the degree of Bachelor of Laws (LL.B.), is also given in the afternoon between 4.50 and 6.30.

The courses open to candidates for the degree of Master of Laws (LL.M.) are, as a general rule, given in the afternoon, though a number of the forenoon courses may be elected as hereinafter indicated, subject to the approval of the Dean.

METHOD OF INSTRUCTION.

Instruction in the class-room is based upon the study and discussion of cases. In some of the courses students are required to read parallel assignments in text-books.

In conducting the discussion of cases in the class-room every effort is made to lead the student to a clear understanding of the fundamental legal principles that may be involved, and to afford him scientific training in accurate methods of study and of reasoning along legal lines. Students are also required to submit written briefs upon doubtful points of law, to draw up contracts, conveyances, and other papers when the nature of the subject in hand is such as to make exercises of this kind useful in giving accurate instruction.

Subjects involving the adjective law are in charge of professors who are engaged in active practice. The general principles of these subjects, taught in the same manner as indicated above, are developed by practice before the Moot Courts.

UNDERGRADUATE PROFESSIONAL COURSES.

Undergraduate students in Arts and Sciences upon the completion of forty-five units of credit may take the first year's work of the course for Bachelor of Laws, crediting them fifteen units, on the completion of which they may receive the academic degree.

COURSES OF INSTRUCTION.

A. FULL-DAY COURSE LEADING TO THE DEGREE OF
BACHELOR OF LAWS (LL.B.).

The course of instruction leading to the degree of Bachelor of Laws extends through a period of three years. A minimum of forty-two hours' work is required of all candidates for this degree, except that regular students registered prior to 1908 will be permitted to qualify for their degrees upon the completion of the course as required at the time of their entrance.

FIRST YEAR SUBJECTS.

First Half-Year.

Contracts. Assistant Professor MONNET. Three hours a week. Williston's Cases on Contracts.

Constitutional Law. Professor HARLAN. Two hours a week. Cooley's Constitutional Law and McClain's Cases on Constitutional Law.

Torts. Professor THURSTON. Five hours a week. Ames & Smith's Cases on Torts.

Domestic Relations. Professor BLAIR. Two hours a week. Long on Domestic Relations.

Criminal Law. Professor EARNEST. Two hours a week. Clark on Criminal Law and Mikell's Cases on Criminal Law.

Bailments. Professor PELLE. One hour a week. Hale on Bailments.

Second Half-Year.

Contracts. Assistant Professor MONNET. Four hours a week. Williston's Cases on Contracts.

Property I. Professor VANCE. Four hours a week. Gray's Cases on Property, Volumes I and II.

Constitutional Law. Professor HARLAN. Two hours a week. Cooley's Constitutional Law and McClain's Cases on Constitutional Law.

Criminal Procedure. Professor EARNEST. One hour a week. Clark on Criminal Procedure.

Agency (including Master and Servant). Professor THURSTON. Three hours a week. Wambaugh's Cases on Agency.

SECOND YEAR SUBJECTS.

First Half-Year.

Property II. Professor VANCE. Two hours a week. Gray's Cases on Property, Volumes II and III.

Common Law Pleading and Practice. Professor CLEPHANE. Two hours a week. Tyler's Stephen on Pleading.

Evidence. Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

Corporations. Professor LORENZEN. Two hours a week. Smith's Cases on Corporations.

Insurance. Professor VANCE. Two hours a week. Wambaugh's Cases on Insurance.

Equity I. Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

Suretyship. Professor THURSTON. Two hours a week. Ames' Cases on Suretyship.

Second Half-Year.

Property II. Professor VANCE. Two hours a week. Gray's Cases on Property, Volumes III and V.

Evidence. Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

Equity Pleading. Professor CLEPHANE. One hour a week. Thompson's Cases on Equity Pleading.

Corporations. Professor LORENZEN. Two hours a week. Smith's Cases on Corporations.

Equity II. Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

Quasi-contracts. Professor THURSTON. Three hours a week. Scott's Cases on Quasi-contracts.

Sales. Professor BLAIR. Two hours a week. Burdick's Cases on Sales.

Partnership. Professor PELLE. One hour a week. Burdick on Partnership.

THIRD YEAR SUBJECTS.

During the session of 1909-10 third-year students may select from the following courses such subjects as, together with the required Moot Court work, will make up the required minimum of twelve hours a week.

Elections of courses to be taken must be made in all cases within ten days after the beginning of the semester in which such courses are given.

First Half-Year.

Moot Court. Professors CLEPHANE, EARNEST, and PETER. Two hours a week. (*Required.*)

Property III. Professor VANCE. Three hours a week. Gray's Cases on Property, Volumes III and V.

Mortgages. Assistant Professor MONNET. Two hours a week. Wyman's Cases on Mortgages.

Municipal Corporations. Professor LORENZEN. Two hours a week. Smith's Cases on Municipal Corporations.

Roman Law. Professor LORENZEN. Two hours a week.

Legal Tactics. Professor CLEPHANE. One hour a week.

Bankruptcy. Professor BRANDENBURG. Two hours a week. Brandenburg on Bankruptcy.

Water Rights and Irrigation. Professor VAN ORSDEL. One hour a week. Long on Irrigation.

Admiralty. Professor SCOTT. Two hours a week. Ames' Cases on Admiralty.

Second Half-Year.

Moot Court. Professors CLEPHANE, EARNEST, and PETER. Two hours a week. (*Required.*)

Conflict of Laws. Professor LORENZEN. Four hours a week. Lorenzen's Cases on Conflict of Laws.

Trusts. Professor THURSTON. Three hours a week. Ames' Cases on Trusts.

Federal Procedure. Professor BRANDENBURG. Two hours a week. Hughes on Federal Procedure.

Organization and Management of Corporations. Professor CLEPHANE. One hour a week. Clephane on the Organization and Management of Corporations.

Equity II. Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

Wills and Administration. Professor PETER. One hour a week.

B. AFTERNOON COURSE LEADING TO THE DEGREE OF BACHELOR OF LAW (B.L.).

The course of instruction leading to the degree of Bachelor of Law extends through a period of three years. A minimum of thirty hours' work is required of all candidates for this degree. This course, covering the fundamental subjects of the law, is intended to prepare students for admission to the bar in any of the States or Territories of the United States.

FIRST YEAR SUBJECTS.

First Half-Year.

Contracts. Assistant Professor MONNET. Three hours a week. Williston's Cases on Contracts.

Constitutional Law. Professor HARLAN. Two hours a week. Cooley's Constitutional Law and McClain's Cases on Constitutional Law.

Torts. Professor THURSTON. Five hours a week. Ames & Smith's Cases on Torts.

Bailments. Professor PEELE. One hour a week. Hale on Bailments.

Second Half-Year.

Contracts. Assistant Professor MONNET. Four hours a week. Williston's Cases on Contracts.

Property I. Professor VANCE. Four hours a week. Gray's Cases on Property, Volumes I and II.

Constitutional Law. Professor HARLAN. Two hours a week. Cooley's Constitutional Law and McClain's Cases on Constitutional Law.

SECOND YEAR SUBJECTS.

First Half-Year.

Property II. Professor VANCE. Two hours a week. Gray's Cases on Property, Volumes II and III.

Evidence. Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

Common Law Pleading and Practice. Professor CLEPHANE. Two hours a week. Tyler's Stephen on Pleading.

Criminal Law. Professor EARNEST. Two hours a week. Clark on Criminal Law and Mikell's Cases on Criminal Law.

Equity I. Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

Second Half-Year.

Property II. Professor VANCE. Two hours a week. Gray's Cases on Property, Volumes III and V.

Evidence. Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

Equity Pleading. Professor CLEPHANE. One hour a week. Thompson's Cases on Equity Pleading.

Criminal Procedure. Professor EARNEST. One hour a week. Clark on Criminal Procedure.

Equity II. Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

Agency (including Master and Servant). Professor THURSTON. Three hours a week. Wambaugh's Cases on Agency.

Partnership. Professor PEELE. One hour a week. Burdick on Partnership.

THIRD YEAR SUBJECTS.

Third-year afternoon students are required to complete the work in Moot Court and Equity and, in addition, at least three hours' work from the subjects scheduled below. The remaining work required of this class may be freely elected from courses not previously taken.

First Half-Year.

Moot Court. Professors CLEPHANE, EARNEST, and PETER. Two hours a week. (*Required.*)

Equity I. Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction. (*Required.*)

Property III. Professor VANCE. Three hours a week. Gray's Cases on Property, Volumes III and V.

Municipal Corporations. Professor LORENZEN. Two hours a week. Smith's Cases on Municipal Corporations.

Bills and Notes. Professor LORENZEN. Three hours a week. Hufcut's Negotiable Instruments: Statutes, Cases and Authorities.

Legal Tactics. Professor CLEPHANE. One hour a week.

Water Rights and Irrigation. Professor VAN ORSDEL. One hour a week. Long on Irrigation.

Second Half-Year.

Moot Court. Professors CLEPHANE, EARNEST, and PETER. Two hours a week. (*Required.*)

Equity II. Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction. (*Required.*)

Conflict of Laws. Professor LORENZEN. Four hours a week. Lorenzen's Cases on Conflict of Laws.

Trusts. Professor THURSTON. Three hours a week. Ames' Cases on Trusts.

Organization and Management of Corporations. Professor CLEPHANE. One hour a week. Clephane on the Organization and Management of Corporations.

FOURTH YEAR SUBJECTS.

Fourth-year afternoon students, candidates for the LL.B. degree, may freely elect from the courses not previously taken, subjects aggregating a sufficient number of hours to satisfy the requirements for this degree. During the session 1909-10 the following courses will be so scheduled as to be available for fourth-year afternoon students.

First Half-Year.

Insurance. Professor VANCE. Two hours a week. Wambaugh's Cases on Insurance.

Suretyship. Professor THURSTON. Two hours a week. Ames' Cases on Suretyship.

Water Rights and Irrigation. Professor VAN ORSDEL. One hour a week. Long on Irrigation.

Roman Law. Professor LORENZEN. Two hours a week.

Municipal Corporations. Professor LORENZEN. Two hours a week. Smith's Cases on Municipal Corporations.

Domestic Relations. Professor BLAIR. Two hours a week. Long on Domestic Relations.

Second Half-Year.

Agency (including Master and Servant). Professor THURSTON. Three hours a week. Wambaugh's Cases on Agency.

Conflict of Laws. Professor LORENZEN. Four hours a week. Lorenzen's Cases on Conflict of Laws.

Trusts. Professor THURSTON. Three hours a week. Ames' Cases on Trusts.

C. LEADING TO THE DEGREE OF MASTER OF LAWS (LL.M.).

Students admitted as candidates for the degree of Master of Laws are required to elect courses, not previously taken, covering a minimum of ten hours a week. These may be freely elected from the courses offered by the Faculty of Law and from the following courses given in The College of the Political Sciences.

Comparative Constitutional Law. Professor WILLOUGHBY. Two hours a week, one-half year.

International Arbitration. Professor BREWER. One hour a week, one-half year. Taylor's International Law.

International Law. Professor SCOTT. Two hours a week, one year. Scott's Cases on International Law.

Government Control of Transportation. President NEEDHAM. Two hours a week, one year.

Administrative Law. Dr. MCBAIN. Two hours a week, first half-year. Goodnow's Cases on Administrative Law.

Private Rights and Immunities under the Constitution. Dr. MCBAIN. Two hours a week, second half-year.

Advanced Practice. Candidates for the Master's degree may also elect advanced practice work in the Moot Court, receiving therefor a credit of two hours for the year.

D. LEADING TO THE DEGREE OF MASTER OF PATENT LAW (M.P.L.).

A special course in Patent Law and Patent Law Practice is given by Professor Church. The purpose of this course is to prepare those taking it for practice in all matters involving the law of patents. The course extends throughout one year, with two lectures or sessions of the Moot Court each week. (For the admission requirements for this course, see page 6.)

E. LEADING TO THE DEGREE OF DOCTOR OF JURISPRUDENCE (J.D.).

The work for this degree is similar in character, method, and scope to that required for the degree of Doctor of Philosophy, and is under the control of the University Faculty of Graduate Studies. See the General Catalogue of the University.

COURSES IN PRACTICE.

A. MOOT COURT WORK.

1. *Third Year:*

Particular stress is laid upon Moot Court work. Aside from the practice court connected with the course in Patent Law, there are four courts in which undergraduate students pursue their work. Three of these are *nisi prius* courts and are presided over by members of the Washington Bar in active practice. The fourth is a Court of Appeals to review the cases tried in the courts of first instance. This court also is composed of members of the Washington Bar.

Every third-year student before receiving the Bachelor's degree is required to prepare the pleadings in and prosecute to judgment the required number of cases in the *nisi prius* courts, with the privilege of appeal to the appellate tribunal. At least two hours in each week during the year must be spent by each third-year student in active participation in Moot Court work in the court-room to which he is assigned.

Statements of facts are furnished, such as would be related to a lawyer in active practice by his client. Each student must determine whether or not upon such facts the particular case in hand is one of common-law or equitable cognizance. He must then frame his pleadings, serve his writs, and answer his adversary's pleadings until issue is joined in legal manner, after which the case is brought on for hearing in strict accordance with the rules of actual practice. Juries are empaneled in accordance with settled legal procedure, witnesses are examined and cross-examined, and the case conducted through all the various stages of the trial or hearing down to and including the judg-

ment or decree, after which, should the case be appealed, it must be carried through the appellate court, involving the preparation of the record on appeal, briefs of counsel, etc.

2. Fourth Year:

The same facilities for Moot Court work as are described above are afforded in the course leading to the degree of Master of Laws. In this course, however, the nature of the cases assigned is somewhat different, involving, in addition to the ordinary cases at common-law or in equity, cases of a special character, such as habeas corpus, certiorari, quo warranto, injunction, mandamus, extradition, replevin, attachment, etc.

3. Officers and Equipment:

The clerk of the Moot Court is one of the assistant clerks of the Supreme Court of the District of Columbia, but his assistants in each court-room are chosen from the student body, from whose ranks are also drawn the criers, jurors, and other officials, thus giving to the students the benefit of practice in administrative judicial machinery. The Moot Court is to all intents and purposes an actual court. The rooms in which the sessions are held are fitted up with judges' benches, clerks' desks, jury-boxes, and counsel table, and from the time the crier announces that the court is in session until he announces its adjournment the procedure is identical with that of a regular judicial tribunal.

It is believed that any student who gives the proper attention to this feature of the law curriculum will be enabled to go out from this institution and creditably try cases in court, although he may never have been in an actual court-room.

A careful record is kept of the work of each student, both as to his pleadings and his conduct of the case in court, and the ratings thus given determine, in connection with his ratings upon other subjects, whether or not he is entitled to a degree.

B. LEGAL TACTICS.

Every young lawyer entering upon his professional career is desirous of availing himself of the experience of an older practitioner and of learning many things which are not taught and cannot be taught from books. It is to meet the needs of this class of men that this course has been inaugurated. It is in charge of a member of the Washington Bar whose practice has been an active one, extending over a period of many years.

A short introductory talk is given upon the relations between attorney and client, including the important subject of fees, after which the student is given the benefit of practical hints upon the manner of start-

ing in practice and opening and furnishing an office, with suggestions as to office systems. Advice is given as to selecting a law library, the best way to find authorities in point, and how such authorities should be used in court.

The student is told how to listen intelligently to his client's grievances; how to draw up the pleadings arising out of these grievances; how to prepare for trial the case thus made, including the work of preparing the evidence; how to try the case and examine and cross-examine witnesses; the manner of making up the record, writing briefs, and conducting the argument on appeal. The subject of professional ethics is discussed. At various times during the year distinguished lawyers are invited to appear and discuss informally special topics of interest to the students.

EXAMINATIONS AND GRADES.

A. UNDERGRADUATE COURSES.

Regular Examinations:

Written examinations are held at the close of each semester upon those subjects that have been completed during that semester. All students, unless specially excused by the Dean, are required to take the first examination held in any subject after their completion of the course in that subject.

No student, except by special permission of the Dean, will be allowed to take an examination in any subject unless he shall be regularly registered and have been in regular attendance upon the lectures and have done all the work required in the course of instruction upon that subject.

Grades:

At all examinations, the grading of students will be indicated by the letters A, B, C, D, E, and F, representing, respectively, *excellent*, *good*, *satisfactory*, *fair*, *conditioned*, and *failed*.

Conditions:

A student receiving the grade of E (*conditioned*), in the regular examination in any course, will be given an opportunity to remove the condition by passing a subsequent examination with the grade of C or better.

The regular examinations for the removal of conditions will be held during the first week of each session. Applications for permission to take any of these examinations must be made to the Dean, in writing, not later than three days before the date for which such examination is scheduled. Candidates for either of the Bachelor's degrees may, by action of the Faculty, be granted special examinations in not more than

two subjects carried as conditions during the first semester of their last year, at the end of that semester, and in one subject carried as a condition during the second semester, at the end of that year.

A student receiving the grade of F (*failed*), in any examination, or the grade of D or E in any examination to pass off a condition in any course, will be required to take the course over again before being permitted to take another examination in such course.

Class Standing:

Students having conditions in more than two subjects will not be advanced from one class to another, nor will candidates for a degree be permitted to carry more than one condition into the second semester of the year in which they expect to be graduated. Students may have, however (subject to the provisions above enumerated), an opportunity to remove conditions, imposed during any session, by taking the regular examinations for the removal of conditions at the beginning of the following session, for which no fee is charged.

Students having conditions in more than three subjects will not be allowed to register except upon special permission from the Dean.

Special Examinations:

No special examinations, other than those above provided for, will be granted to any students except those of the graduating class who, for good cause, shall have been excused by the Dean from taking any regular examination during the third year.

Attendance:

Regular attendance is required in all courses; and the examination grade of any student in any course may be withheld and the passing of another examination or the repetition of the course may be required on the sole ground of unsatisfactory attendance.

Election of Courses:

No student shall be allowed to register in courses aggregating more than sixteen hours during any one semester without first obtaining the permission of the Faculty.

Every student who is a candidate for graduation with the degree of Bachelor of Laws in his third year shall take and pass in each semester of his third-year courses aggregating ten hours.

Election of courses to be taken must be made in all cases within ten days after the beginning of the semester in which such courses are given.

B. GRADUATE COURSES.

Examinations in graduate courses will be given at such times and under such conditions as may be designated by the professors in charge.

DEGREES.**I. BACHELOR OF LAWS.**

The degree of Bachelor of Laws will be conferred upon students who shall have passed satisfactory examinations upon the subjects required in the entire course of three years and whose attendance and conduct have been satisfactory to the Faculty.

The degree of Bachelor of Laws *with distinction* will be awarded to students whose average percentage in all subjects is equivalent to the grade of A.

2. BACHELOR OF LAW (B.L.)

The degree of Bachelor of Law will be conferred upon students who shall have completed the work prescribed for this degree, and whose attendance and conduct have been satisfactory to the Faculty.

3. MASTER OF LAWS.

The degree of Master of Laws will be conferred upon students who have completed the work prescribed for this degree with the grade of C or better and whose attendance and conduct have been satisfactory to the Faculty.

4. MASTER OF PATENT LAW.

The degree of Master of Patent Law will be conferred upon students who shall have successfully completed the work of the Patent Law course and whose attendance and conduct have been satisfactory to the Faculty.

5. DOCTOR OF JURISPRUDENCE.

The degree of Doctor of Jurisprudence is given for graduate work in the science of the law upon the same terms and conditions as the degree of Doctor of Philosophy in the Department of Arts and Sciences. See the General Catalogue.

LAW LIBRARY AND READING-ROOM.

A well-equipped working library, comprising about 5200 volumes, is open to the students in Law Lecture Hall from 9 a. m. to 10 p. m. Competent librarians are in charge and will give students assistance in looking up subjects and in the use of books.

The Library contains the standard text-books, the West Reporter system of Federal and State Decisions complete, State Reports, the English Common Law and Chancery Reports, Encyclopædias of Law, Digests, reference books, and current law publications.

Adjoining the Library is a conversation-room for students, affording opportunity for consultation.

In addition to these facilities, the students have free access to the Congressional Library and other public libraries.

PRIZES.

A prize offered by the Edward Thompson Company, of a set of the Encyclopædia of Law, first or second edition, or a set of the Encyclopædia of Pleading and Practice, is awarded each year to the senior law student who shall write the best thesis on some legal subject to be assigned by the Faculty.

Three prizes—one of \$40, one of \$30, and one of \$20—are annually given to the respective authors of the best three essays handed in by such members of the third-year class as shall compete for them and shall pass successful examinations.

A prize of \$25 in gold, offered by Mr. Fritz von Briesen, called the "Ellsworth Prize," is awarded for the best work done in the Patent Law Course by a student receiving the degree of Master of Patent Laws.

PUBLIC SPEAKING.

Excellent facilities for training in the art of public speaking are afforded by the two debating societies that have been organized in the Department of Law. These societies, known as the Columbian and Needham Debating Societies, meet weekly for debate. Membership in these societies is entirely optional, but their work is encouraged in every legitimate way by the Faculty, and students are urgently advised to take part in their exercises. During each academic year several intercollegiate debates are held. Membership upon the intercollegiate debating teams is an honor eagerly sought and made the prize to be won in separate preliminary contests. The general conduct of these intercollegiate debates is under the supervision of a committee from the Faculty.

ADMISSION TO THE BAR OF THE DISTRICT OF COLUMBIA.

By the rules of the Supreme Court of the District of Columbia, applicants for admission to the Bar are required to have studied law for three years under the direction of a competent attorney, but by those rules the course in the Department of Law of the University is regarded as discharging this requirement.

FEES.

1. Matriculation fee (payable once).....	\$5
2. Annual library fee.....	2
3. Tuition fee per annum for each hour taken per week.....	10
4. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, excepting for courses which do not begin with the terms	2
5. Fee for graduation	10
6. Tuition fee for course in Patent Law.....	40
7. Fee for a certificate under the seal of the University.....	2

No change will be made in the fees fixed at the time of registration except in case of withdrawal, and then only upon notice in due form, and from the end of the current quarter session when such withdrawal shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form to be obtained from the Secretary and will only be received at the end of a quarter session.

The library fee will not be charged for the first half-year during which a course is completed in the case of students who enter at the beginning of the second half-year and pay the library fee for that year.

PAYMENT OF FEES.

All fees are to be paid to the Treasurer. Regular tuition fees are payable quarterly in advance. Fees for special courses are payable monthly in advance. Matriculation and library fees are payable in full in advance.

BOARD AND ROOMS.

A register of approved boarding houses is kept by the Treasurer. Accommodations cost from \$25 to \$40 a month.

For catalogues, application blanks, and further information, address

THE SECRETARY,
The George Washington University,
Washington, D. C.

DEPARTMENT OF MEDICINE.

FACULTY.

The names are arranged in the several groups in the order of assignment.

PRESIDENT OF THE UNIVERSITY.

CHARLES WILLIS NEEDHAM, LL.D.

J. FORD THOMPSON, M.D.,
Professor of Surgery, Emeritus.

PROFESSORS.

A. F. A. KING, A.M., M.D., LL.D.,
Professor of Obstetrics and Dean Emeritus of the Faculty.
Consulting Physician, Children's Hospital; *Obstetrician-in-Chief to The George Washington University Hospital and Dispensary.*
1315 Massachusetts Ave., N. W.

GEORGE NICHOLAS ACKER, A.M., M.D.,
Professor of Pediatrics and Clinical Professor of Medicine.
Physician to the Children's Hospital; Consulting Physician to the Episcopal Eye, Ear and Throat Hospital, to the Lutheran Infirmary, to the Casualty Hospital, and to the Eastern Dispensary; *Pediatrician-in-Chief to The George Washington University Hospital and Dispensary.*
913 15th St., N. W.

HENRY CRÈCY YARROW, M.D.,
Professor of Dermatology.
Consulting Physician to the Garfield Memorial Hospital and to the Children's Hospital; Visiting Physician to the Woman's Clinic; *Dermatologist-in-Chief to The George Washington University Hospital and Dispensary.*
814 17th St., N. W.

D. KERFOOT SHUTE, A.M., M.D.,
Professor of Anatomy and Associate Professor of Ophthalmology.
Consulting Ophthalmologist, Government Hospital for the Insane; Ophthalmologist to Providence Hospital, Central Dispensary and Emergency Hospital, Columbia Hospital, and to the Washington Hospital for Foundlings; *Ophthalmologist-in-Chief to The George Washington University Hospital and Dispensary.*
1719 De Sales St.

STERLING RUFFIN, M.D.,
Professor of Medicine.
Visiting Physician, Columbia Hospital for Women; Consulting Physician to the Central Dispensary and Emergency Hospital and to the Government Hospital for the Insane; *Physician-in-Chief to The George Washington University Hospital and Dispensary.*
1335 Connecticut Ave.

C. E. MUNROE, S.B., PH.D.,

Professor of Chemistry.

President American Chemical Society, 1898; President Washington Chemical Society, 1895; Vice-President of the American Association for the Advancement of Science, 1888; Fellow of the Chemical Society of London and of the Chemical Gesellschaft, Berlin; etc., etc.

2115 S. St., N. W.

CHARLES WILLIAMSON RICHARDSON, M.D.,

Professor of Laryngology, Rhinology, and Otology.

Laryngologist to Providence Hospital, to the Episcopal Eye, Ear and Throat Hospital, and to the Washington Hospital for Foundlings; *Laryngologist-in-Chief to The George Washington University Hospital and Dispensary.*

1317 Connecticut Ave.

J. WESLEY BOVÉE, M.D.,

Professor of Gynecology.

Gynecologist to the Columbia Hospital for Women; *Gynecologist-in-Chief to The George Washington University Hospital and Dispensary.*

The Rochambeau.

THOMAS A. CLAYTOR, M.D.,

Professor of Materia Medica and Therapeutics and Clinical Professor of Medicine.

Visiting Physician to the Garfield Memorial Hospital and to the Tuberculosis Hospital of the District of Columbia.

1315 New Hampshire Ave.

A. R. SHANDS, M.D.,

Professor of Orthopedic Surgery.

Orthopedic Surgeon to the Central Dispensary and Emergency Hospital; *Orthopedic Surgeon, The George Washington University Hospital and Dispensary.*

901 16th St., N. W.

FRANCIS R. HAGNER, M.D.,

Professor of Genito-Urinary Surgery and Venereal Diseases.

Genito-Urinary Surgeon to the Garfield Memorial Hospital; *Chief of the Genito-Urinary Clinic, The George Washington University Hospital and Dispensary.*

1725 N St., N. W.

WILLIAM C. WOODWARD, LL.M., M.D.,

Professor of Medical Jurisprudence.

Health Officer, District of Columbia.

508 L St., N. W.

WILLIAM A. WHITE, M.D.,

Professor of Mental and Nervous Diseases.

Superintendent of the Government Hospital for the Insane, District of Columbia; Lecturer on Insanity, U. S. Army Medical School and U. S. Navy Medical School.

Government Hospital for the Insane.

I. W. BLACKBURN, M.D.,

Professor of Morbid Anatomy.

Pathologist to the Government Hospital for the Insane, District of Columbia.

Government Hospital for the Insane.

SHEPHERD IVORY FRANZ, A.B., PH.D.,

Professor of Physiology.

Psychologist to Government Hospital for the Insane; Research Assistant, Carnegie Institute, Washington, D. C.

Government Hospital for the Insane.

J. J. KINYOUN, M.D., PH.D.,

*Professor of Pathology.*Pathologist, Department of Health, District of Columbia; *Pathologist-in-Chief to The George Washington University Hospital and Dispensary.*

1423 Clifton St.

WILLIAM CLINE BORDEN, M.D.,

*Professor of Surgery and Dean.*Lieut.-Colonel, Medical Corps, United States Army, Retired; *Surgeon-in-Chief to The George Washington University Hospital and Dispensary.*

1801 California St., N. W.

D. W. PRENTISS, M.D.,

*Professor of Hygiene.**Assistant in Gynecology, The George Washington University Dispensary.*

1315 M St., N. W.

HURON W. LAWSON, M.S., M.D.,

*Professor of Histology and Embryology and Associate in Surgery.*Visiting Obstetrician, Freedmen's Hospital; *Associate in Surgery, The George Washington University Hospital and Dispensary.*

1520 9th St., N. W.

ASSOCIATE PROFESSORS.

WILLIAM K. BUTLER, A.M., M.D.,

*Associate Professor of Ophthalmology.*Ophthalmologist to the Garfield Memorial Hospital; Surgeon-in-Charge, Lutheran Eye, Ear and Throat Infirmary; *Associate in Ophthalmology, The George Washington University Hospital and Dispensary.*

1207 M St., N. W.

W. O. OWEN, M.D.,

Associate Professor of Anatomy.

Major, Medical Corps, United States Army, Retired; Chairman Executive Committee of the Board of Trustees, Garfield Memorial Hospital.

2123 18th St., N. W.

ASSISTANT PROFESSOR.

ISAAC KING PHELPS, PH.D.,

*Assistant Professor of Physiological Chemistry.***CLINICAL PROFESSORS.**

RANDOLPH BRYAN CARMICHAEL, M.D.,

*Clinical Professor of Dermatology.*Dermatologist to the Garfield Memorial Hospital, the Providence Hospital, the Washington Hospital for Foundlings, the Central Dispensary and Emergency Hospital; *Assistant in Dermatology, The George Washington University Hospital and Dispensary.*

818 17th St., N. W.

JOHN VAN RENSSELAER, A.B., M.D.,

Clinical Professor of Surgery.

Attending Surgeon to the Garfield Memorial Hospital.

The Rochambeau.

ALBERT L. STAVELY, M.D.,

Clinical Professor of Gynecology.

Gynecologist to the Garfield Memorial Hospital.

1744 M St., N. W.

ARTHUR A. SNYDER, M.D.,

Clinical Professor of Surgery.

Attending Surgeon to the Garfield Memorial Hospital and to the Women's Clinic.

3051 N St., N. W.

JOHN R. WELLINGTON, M.D.,

Clinical Professor of Surgery.

Visiting Surgeon to the Garfield Memorial Hospital and to the Children's Hospital;
Associate in Surgery, The George Washington University Hospital and Dispensary.

1706 Rhode Island Ave., N. W.

ASSOCIATES.

JOHN B. NICHOLS, M.D.,

Associate in Medicine.

Pathologist to the Garfield Memorial Hospital and to the Episcopal Eye, Ear and Throat Hospital.

1321 Rhode Island Ave.

EDWARD E. MORSE, L.M., M.D.,

Associate in Obstetrics.

Obstetrician to the Providence Hospital and to the Freedmen's Hospital; Assistant Obstetrician to the Columbia Hospital for Women; *Associate in Obstetrics, The George Washington University Hospital and Dispensary.*

1527 I St., N. W.

EDWARD G. SEIBERT, M.D.,

Associate in Chemistry and Instructor in Ophthalmology.

Assistant Surgeon, Lutheran Infirmary; *Associate in Ophthalmology, The George Washington University Hospital and Dispensary.*

916 14th St., N. W.

JULIAN M. CABELL, M.D.,

Associate in Obstetrics.

Associate in Obstetrics, Columbia Hospital for Women; *Associate in Obstetrics, The George Washington University Hospital and Dispensary.*

The Rochambeau.

CHARLES STANLEY WHITE, M.D.,

Associate in Surgery.

Associate in Surgery to the Central Dispensary and Emergency Hospital; *Associate in Surgery, The George Washington University Hospital and Dispensary.*

The Farragut.

H. H. DONNALLY, A.M., M.D.,

Associate in Medicine.

Attending Physician, Home for Incurables; *Associate in Medicine, The George Washington University Hospital and Dispensary.*

1018 14th St., N. W.

FRANK FREMONT-SMITH, M.D.,

Associate in Pediatrics.

Attending Physician to the Washington Hospital for Foundlings and to the Children's Hospital; Consulting Physician to the Garfield Memorial Hospital; *Associate in Pediatrics, The George Washington University Hospital and Dispensary.*

1731 H St., N. W.

WM. F. M. SOWERS, A.B., M.D.,

Associate in Surgery.

Associate Surgeon to the Providence Hospital; Visiting Surgeon to the Washington Hospital for Foundlings and to the Freedmen's Hospital; *Associate in Surgery, The George Washington University Hospital and Dispensary.*

1707 Massachusetts Ave.

G. BROWN MILLER, B.S., M.D.,

Associate in Gynecology.

Attending Gynecologist to the Central Dispensary and Emergency Hospital; Associate Gynecologist to the Columbia Hospital for Women; *Associate in Gynecology, The George Washington University Hospital and Dispensary.*

1731 H St., N. W.

B. M. RANDOLPH, M.D.,

Associate in Materia Medica and Therapeutics.

Attending Physician, Garfield Dispensary; Attending Physician, Tuberculosis Dispensary; *Assistant Physician, The George Washington University Dispensary.*

2010 R St., N. W.

HENRY R. ELLIOTT, M.D.,

Associate in Physiology and Pharmacology.

Physician to the Central Dispensary and Emergency Hospital; *Assistant in Genito-Urinary Surgery, The George Washington University Hospital and Dispensary.*

The Maury.

WILBUR R. BRANDENBURG, M.D.,

Associate in Bacteriology and Pathology.

2335 18th St., N. W.

CLINICAL ASSOCIATES.

LUTHER H. REICHELDERFER, M.D.,

Clinical Associate and Instructor in Surgery.

Attending Surgeon to the Garfield Memorial Hospital, and to the Hospital for Tuberculosis, District of Columbia.

1206 P St., N. W.

EDGAR P. COPELAND, M.D.,

Clinical Associate in Pediatrics.

Member of the Dispensary Staff of the Children's Hospital and of the Board of Medical Examiners of the District of Columbia; *Associate in Pediatrics, The George Washington University Hospital and Dispensary.*

The Rockingham.

DUFF G. LEWIS, M.D.,

Clinical Associate in Surgery.

1311 14th St., N. W.

JOHN T. KELLY, M.D.,

Clinical Associate in Surgery.

Gynecologist to Providence Hospital.

1312 15th St., N. W.

W. A. FRANKLAND, M.D.,

Clinical Associate in Medicine.

Gynecologist to the Casualty Hospital, and Eastern Dispensary.

1300 Massachusetts Ave., N. W.

NOBLE P. BARNES, M.D.,

Clinical Associate in Medicine and Instructor in Materia Medica and Therapeutics.

Pediatrician to the Freedmen's Hospital and to the Eastern Dispensary and Casualty Hospital.

212 Maryland Ave., N. E.

INSTRUCTORS.

S. H. GREENE, JR., M.D.,

Instructor in Anatomy.

Assistant Surgeon, Episcopal Eye, Ear, Nose and Throat Hospital.

The Burlington.

HOMER S. MEDFORD, M.D.,

Instructor in Obstetrics.

Assistant in Out-door Maternity Service, Eastern Dispensary and Casualty Hospital.

151 C St., N. E.

J. L. RIGGLES, M.D.,

Instructor in Anatomy and Gynecology.

Assistant Gynecologist, The George Washington University Dispensary.

1424 K St., N. W.

T. M. PRICE, PH.D.,

Instructor in Biochemistry.

The Iowa.

O. D. SWETT, M.S.,

Instructor in Chemistry.

Chevy Chase, Md.

WALTER H. MERRILL, M.D.,

Instructor in Electro-Therapeutics.

Radiographer to the Garfield Memorial Hospital; Radiographer to The George Washington University Hospital and Dispensary.

1913 14th St., N. W.

O. A. M. McKIMMIE, M.D.,

Instructor in Laryngology and Otology.

Assistant Laryngologist, The George Washington University Hospital and Dispensary; Associate Physician, the Episcopal Eye, Ear and Throat Hospital.

1317 Rhode Island Ave., N. W.

H. S. DYE, M.D.,

Instructor in Laryngology and Otology.

Assistant in Laryngology, the Central Dispensary and Emergency Hospital; Assistant Laryngologist, The George Washington University Hospital and Dispensary.

1406 L St., N. W.

TRUMAN ABBE, M.D.,

Instructor in Physiology and Surgery.

Anæsthetist to the Columbia Hospital for Women.

1819 M St., N. W.

J. LAWN THOMPSON, M.D.,

Instructor in Surgery.

805 12th St., N. W.

W. W. WILKINSON, M.D.,

Instructor in Medicine.

Assistant Pathologist to the Garfield Memorial Hospital.

The Burlington.

CHARLES W. HYDE, M.D.,

Instructor in Medicine.

The Plymouth.

ARTHUR L. HUNT, M.D.,

Instructor in Surgery.

Assistant Surgeon, The George Washington University Dispensary.

The Burlington.

E. T. M. FRANKLIN, M.D.,

Instructor in Surgery.

1315 19th St., N. W.

W. J. FRENCH, M.D.,

Instructor in Pediatrics.

Assistant Pediatrician to the Central Dispensary and Emergency Hospital.

1736 18th St., N. W.

GEORGE B. HEINECKE, M.D.,

Instructor in Anatomy.

Brightwood, D. C.

E. P. MAGRUDER, M.D.,
Instructor in Anatomy.

The Ashley.

DANIEL T. BIRTWELL, M.D.,
Instructor in Anatomy.
 Assistant, Surgical Service, Central Dispensary and Emergency Hospital.
 2719 14th St., N. W.

ADAM KEMBLE, M.D.,
Instructor in Gynecology.
Assistant Gynecologist, The George Washington University Hospital.
 The Cecil.

VERGIL B. JACKSON, M.D.,
Instructor in Anatomy and Gynecology.
 Assistant Surgeon, Central Dispensary and Emergency Hospital.
 The Brunswick.

SOTHORON KEY, M.D.,
Instructor in Medicine.
 1716 H St., N. W.

H. G. FULLER, M.D.,
Instructor in Genito-Urinary Surgery and Venereal Diseases.
Assistant, Genito-Urinary Service, The George Washington University Hospital and Dispensary.

C. S. BUTLER, M.D.,
Instructor in Bacteriology and Tropical Diseases,
 U. S. Navy Medical School, 1333 Harvard St.

CLARA SOUTHMAYD LUDLOW, Ph.D., M.D.,
Instructor in Histology and Embryology,
 Address G. W. U.

THE MEDICAL STAFF OF THE GEORGE WASHINGTON UNIVERSITY HOSPITAL AND DISPENSARY.

DIVISION OF MEDICINE.

General Medicine.

STERLING RUFFIN, M.D.	Physician-in-Chief
GEORGE N. ACKER, M.D.,	} Associates
THOMAS A. CLAYTOR, M.D.,		
H. H. DONNALLY, M.D.,		
W. A. FRANKLAND, M.D.,	} Assistants
W. C. MOORE, M.D.,		
E. B. JONES, M.D.,		
F. E. HARRINGTON, M.D.,		

Diseases of Children.

GEORGE N. ACKER, M.D.	.....	<i>Pediatrician-in-Chief</i>
FRANK FREMONT-SMITH, M.D.,	}	.....<i>Associates</i>
E. P. COPELAND, M.D.,		

Dermatology.

HENRY C. YARROW, M.D.	.....	<i>Dermatologist-in-Chief</i>
RANDOLPH B. CARMICHAEL, M.D.	.....	<i>Associate</i>

General Surgery.

W. C. BORDEN, M.D.	<i>Surgeon-in-Chief</i>
C. S. WHITE, M.D.,	} <i>Associates</i>
JOHN R. WELLINGTON, M.D.,		
W. F. M. SOWERS, M.D.,		
ARTHUR L. HUNT, M.D.,		

Orthopedics.

A. R. SHANDS, M.D.	<i>Orthopedic Surgeon</i>
--------------------	-------	---------------------------

Genito-Urinary Diseases.

FRANCIS R. HAGNER, M.D.	.....	<i>Genito-Urinary Surgeon</i>
HENRY R. ELLIOTT, M.D.,	}	.....<i>Associates</i>
HENRY G. FULLER, M.D.,		

Gynecology.

J. WESLEY BOVÉE, M.D.	.....	<i>Gynecologist-in-Chief</i>
G. BROWN MILLER, M.D.	.....	<i>Associate</i>
D. W. PRENTISS, M.D.,	}	.....<i>Assistants</i>
J. L. RIGGLES, M.D.,		
V. B. JACKSON, M.D.,		
ADAM KEMBLE, M.D.,		

Obstetrics.

A. F. A. KING, M.D.	.....	<i>Obstetrician-in-Chief</i>
E. E. MORSE, M.D.,	}	.....<i>Associates</i>
J. M. CABELL, M.D.,		

Ear, Throat and Nose.

CHAS. W. RICHARDSON, M.D.	.....	<i>Laryngologist-in-Chief</i>
O. A. M. MCKIMMIE, M.D.,	}	.....<i>Associates</i>
H. S. DYE, M.D.,		
C. L. BILLARD, M.D.,	}	.....<i>Assistants</i>
MEADE MOORE, M.D.,		

Ophthalmology.

E. KERFOOT SHUTE, M.D.	.....	<i>In Charge</i>
W. K. BUTLER, M.D.	.....	<i>Associate</i>
E. G. SEIBERT, M.D.	.....	<i>Assistant</i>

Residents.

A. J. BROWNING, M.D.....	<i>Senior Interne</i>
F. W. McKNIGHT, M.D.,	}..... <i>Assistants</i>
W. R. JOBSON, M.D.,	
S. B. POLE, M.D.,	
MISS MARY BELLE STRUBEL.....	<i>Superintendent of Nurses</i>

GENERAL STATEMENT.

The Department of Medicine of the George Washington University, in the chronological order of establishment, is the seventeenth Medical School in the United States. The first course of lectures began in March, 1825. For many years the school was known as the National Medical College; subsequently as the Department of Medicine of the Columbian University. By virtue of an Act of Congress approved January 23, 1904, the Columbian University changed its name to "The George Washington University."

When first established, and for many years thereafter, this school, like most others in this country, gave only a two years' course of five months each. In 1878 the course was lengthened by the establishment of a Spring Session, devoted to lectures in certain special subjects. In 1879 the course was lengthened to seven months and attendance upon three annual sessions required and in 1893 attendance on four regular courses was made obligatory upon all candidates for the degree of Doctor of Medicine. In order to increase the facilities for actual bedside teaching, the University Hospital was established in 1898 and made a part of the Department of Medicine. In 1902 the old Medical College building, in which the exercises had been held since 1867, gave place to the present enlarged and commodious structure.

The Medical Department of the University has been for several years a member of the Association of American Medical Colleges, and its students and graduates have the advantages arising from such membership. Its curriculum, while including all the subjects required by the standard of the Association of Medical Colleges, gives more hours to each subject, and has additional subjects which are of the greatest value in thorough preparation for the profession of medicine.

BUILDINGS AND OTHER FACILITIES.

The Buildings of the Medical Department consist of the Medical College Building, the University Hospital and Dispensary, and necessary adjunct buildings. They are most advantageously situated in the heart of the city near both systems of car lines. The University Hospital adjoins the Medical College Building, thereby making its clinical facilities directly available in the College. The pathological material,

and the material for clinical microscopy and clinical chemistry afforded by the Hospital and Dispensary, are directly used in the laboratories of the school.

The **Medical College Building** is a modern, commodious structure, with spacious, well-lighted, well-ventilated lecture rooms, and Histological, Bacteriological, Physiological, and Medical Laboratories.

The **Laboratories** are equipped with the most approved appliances, so that students may adequately pursue the laboratory courses and acquire the technical skill necessary in modern clinical and research methods. The dissecting-room is large, well-ventilated, and well-lighted by large skylights.

The **University Medical Library** is open for study and consultation from 9 a. m. to 9.00 p. m. It contains at present more than 1400 volumes, and provision is made in the annual library fee charged every student to add to it as published the important new works on medicine. It is an excellent working collection for the medical student, as it affords opportunity to adequately read up on the subjects presented in the courses.

The **Pathological Museum** contains a great many valuable and interesting specimens. Their number is increased by additions from time to time. These specimens are particularly valuable to the students as illustrating the changes produced by disease.

The **advantages of Washington** as a place for pursuing the study of medicine are many. This city now has over three hundred thousand inhabitants, providing abundant clinical material to the hospitals, which have an aggregate of over three thousand beds. In these hospitals clinical instruction, in addition to that given in the University Hospital, is given by members of the faculty.

The great libraries and museums connected with the various Government institutions afford unparalleled facilities for study.

The Library of the Surgeon General's office of the United States Army is the most complete medical library in the world. This library, as all other libraries of the Government, is open to the public between the hours of 9 a. m. and 4.30 p. m. There is also the Library of Congress and the many excellent libraries of the various other Government offices.

The Army Medical Museum affords an unrivaled opportunity for studying the conditions met with in military surgery. It contains on exhibition a collection of anatomical and pathological specimens unequalled by any other museum. Other Government museums are the Museum of Hygiene, in connection with the Medical Department of the Navy. The National Museum contains the most complete and best

arranged collection of materia medica in the world. The drugs are shown in all their processes of manufacture. The Botanic Gardens, the Smithsonian Institution, the Fish Commission, the Department of Agriculture, all afford opportunities for study both in medicine and its collateral sciences.

On account of the many advantages offered in this city, the Army and Navy Medical Schools have been here located. The Alumni of this College is largely represented in all public services, and has been highly successful in passing the rigid examinations by them. Ten per cent of the total number of the regular medical corps of the United States Army are graduates of this College.

Aside from the special advantages offered for the study of medicine, the cosmopolitan character of the city of Washington, its climate (not excessively cold in winter), its beauty, and its interests, which, as it is the seat of the general government, are broad and national, make it an ideal place for the student to pass four years of preparation for the practice of a learned profession.

The **Academic Year** begins on the last Wednesday in September and ends on the second Wednesday in June. The next session, the eighty-ninth, begins September 29, 1909, and ends June 8, 1910.

Students must register promptly at the beginning of the session, in order that their time of study shall count as a full year.

Degrees are conferred at Commencement, the second Wednesday in June; at the Fall Convocation, the third Wednesday in October, and at the Winter Convocation, February 22.

ADMISSION.

Candidates for matriculation must show that they are fitted by previous education to study medicine. The requirements are those of the Association of American Medical Colleges and are as follows:

Candidates for matriculation must present creditable certificates of good moral character from two physicians in good standing.

The educational requirements for admission are those of the Association of Medical Colleges (equivalent to the 15 units of credit required for the College of Arts and Sciences), and are as follows:

SECTION 1. (a) A Bachelor's degree from an approved college or university.

(b) A diploma from an accredited high school, normal school, or academy requiring for admission evidence of the completion of an eight-year course in primary and intermediate grades; and for graduation not less than four years of study, embracing not less than two years (4 points) of foreign language, of which one must be Latin, two years (4 points) of mathematics, two years (4 points) of English, one year

(2 points) of history, two years (4 points) of laboratory science, and six years (12 points) of further credit in language, literature, history, or science.

(c) An examination in the following branches:

A. Required (18 points); Mathematics (4 points); English (4 points); History (2 points); Language (two must be Latin, 4 points); Science (taken from physics, chemistry, botany, zoölogy), 4 points.

B. Optional (to 12 points); English, 2 points; History, 6 points; Language, 6 points; Manual Training, 2 points; Mechanical Drawing, 1 point; Natural Science (botany, biology, and zoölogy), 2 points; Astronomy (1), Civics (1), Geology (1), Physical Geography (1), Physiology, and Hygiene (1), Political Economy (1).

(One point in any subject in a high school or academic course demands not less than five periods per week of forty-five minutes each for eighteen weeks.)

(d) Certificates from reputable instructors recognized by the State Board of Medical Examiners duly authorized by law or by the Superintendent of public instruction in States having no examining board may be accepted in lieu of any part of this examination.

SEC. 2. This examination must be conducted by or under the authority of the Board of Examiners or the Superintendent of public instruction of the city or State in which the college is located. In no case shall it be conducted by any person connected with the faculty, medical or otherwise, of the institution to which the student is seeking admission.

SEC. 3. A student may be allowed to enter on his medical work conditioned in not more than six points, and these conditions must be removed by satisfactory examination before he is allowed to enter on the second year of his medical course.

The examinations (c) are conducted by examiners appointed by the Superintendent of Schools of the District of Columbia.

As the laws relating to the preliminary educational qualifications required of students of medicine differ in many of the States of the Union, candidates are advised to make themselves familiar with the provisions of the medical statutes of the States in which they contemplate applying for license to practice. Attention to this precaution may save future embarrassment.

Examinations for admission to the first-year Medical class will be held in Hall No. 2 of the Medical Building, in accordance with the following schedules:

September 13, 10 a. m., English.

September 14, 10 a. m., Mathematics.

September 15, 10 a. m., Physics.

September 16, 10 a. m., Latin.

September 17, 10 a. m., Electives.

ADMISSION OF STUDENTS FROM OTHER SCHOOLS.

Students who have attended one or more terms at any other medical college in good standing will be admitted to advanced standing upon passing the examination required of students for the stage at which they propose to enter, or upon presenting certificates of examination covering courses equal to those in this College.

Students, approved by the Dean, not candidates for the degree of Doctor of Medicine, may be admitted as special students without examination to pursue any course they may elect.

SYSTEM OF INSTRUCTION.

The term of study for the degree of Doctor of Medicine consists of four years of eight months each.

Instruction is carried on by laboratory work, recitations, lectures, bedside instruction and hospital and dispensary clinics. Particular stress is laid upon laboratory work and clinical teaching. The clinics of the University Hospital and Dispensary are utilized to the fullest extent, as the Hospital and the Medical College are under the same control. Additional clinics are given in other hospitals in the city to which members of the faculty are attached.

While the greatest stress is laid upon laboratory work and the clinical teaching, it is recognized that the facts so obtained must be correlated and shown in their due relation to each other and to the science of medicine.

To this end didactic lectures are maintained in certain branches, as they have been found necessary to give a systematic and comprehensive idea of the larger subjects in medicine. These lectures are followed by systematic and thorough quizzes, so that it may be certain that the students properly and thoroughly grasp the ideas presented by the lecturers.

The recitation and quiz work is made so complete that students do not need to employ private quizmasters.

The object sought throughout the courses is to thoroughly ground the students in the knowledge which is necessary to the practitioner of medicine. No particular attempt is made to graduate specialists in any subject. It is believed that the four years allowed are no more than sufficient time for the adequate preparation of the general practitioner.

The policy adopted by the College is to give a comprehensive, well-graded and well-proportioned course; one that will adequately prepare the graduate to practice general medicine and meet the requirements of State Boards.

ORDER OF INSTRUCTION.

A general view of the subjects studied in each year are shown in the following table:

First Year.	Second Year.	Third Year.	Fourth Year.
Anatomy.	Organic and	Practice.	Clinical Medicine.
Histology.	Physiological	Surgery.	Clinical Surgery.
Embryology.	Chemistry.	Obstetrics.	Clinical Obstetrics.
Physiology.	Pathology.	Therapeutics.	Clinical Gynecology.
General	Bacteriology.	Gynecology.	Laryngology.
Chemistry.	Topographical	Medical	Otology.
	Anatomy.	Jurisprudence.	Ophthalmology.
	Materia Medica.	Clinical	Hygiene.
	Pharmacology.	Microscopy.	Surgical Anatomy.
	Surgical	Clinics.	Dermatology.
	Technique.	Dietetics.	Psychiatry.
	Physical		Pediatrics.
	Diagnosis.		Neurology.
			Tropical Diseases.

The greater part of the fourth year is devoted to clinical work in the hospitals. During this year, however, general instruction is also given in Mental Diseases, Neurology, Dermatology, Ophthalmology, Laryngology, and Otology. Not less than 1000 hours of clinical works are required.

CLASSIFICATION OF STUDENTS.

Students are divided into four classes, according to their proficiency, and the time spent, viz: first year, second year, third year, and fourth year. Students cannot advance to a higher class with more than one condition. Students failing in any subject or subjects may be permitted at the next examination period a re-examination in the subjects in which they fail. The Faculty may dismiss any student from the school, if in its judgment such student be deemed an unsuitable person, intellectually or otherwise for the profession of medicine.

Optional Five-Year Course.

Since the session of 1904-05 a five-year optional course has been offered for the benefit of students. In this course the subjects are arranged as follows:

First Year.	Second Year.	Third Year.	Fourth Year.	Fifth Year.
Anatomy. Histology. General Chemistry.	Physiological and Organic Chemistry. Physiology. Materia Medica. Pharmacology.	Bacteriology. Pathology. Hygiene. Therapeutics. Medical Juris- prudence. Clinical Microscopy. Physical Diagnosis.	Practice. Surgery. Obstetrics. Gynecology.	Clinical Medicine. Clinical Obstetrics. Clinical Surgery. Laryngology. Otology. Ophthal- mology. Dermatology. Psychiatry. Pediatrics. Neurology. Tropical Diseases.

ANATOMY.

D. KERFOOT SHUTE, A.B., M.D.....	Professor of Anatomy
W. O. OWEN, M.D.....	Associate Professor of Anatomy
S. H. GREENE, JR., M.D.....	Instructor in Anatomy
J. L. RIGGLES, M.D.....	Instructor in Anatomy
G. B. HEINECKE, M.D.....	Instructor in Anatomy
E. P. MAGRUDER, M.D.....	Instructor in Anatomy
D. T. BIRTWELL, M.D.....	Instructor in Anatomy
VERGIL B. JACKSON, M.D.....	Instructor in Anatomy
PRESLEY HUNT, M.D.....	Instructor in Anatomy

The first year course in Anatomy is given in a series of lectures, demonstrations, recitations from text-books, and practical laboratory work. The lectures are illustrated by lantern slides, models, and diagrams. The student is required to dissect satisfactorily the lateral half of a cadaver. Throughout the course every opportunity is taken to emphasize the application of anatomy to the practice of medicine in all its departments.

Osteology and Syndesmology are taught by recitations and demonstrations at the beginning of the course, preparatory to the more advanced studies in Anatomy.

In the second year a course in Topographical Anatomy is given, in which recitations and laboratory demonstrations are used to thoroughly familiarize the student with the subject. In the fourth year a course

in operative surgery on the cadaver, and general surgical anatomy, is given in connection with the course in surgery. In this way a thorough preparation in general and applied anatomy is given.

Text-books: Gray's Anatomy, Cunningham's Text-book of Anatomy, Cunningham's Manual of Practical Anatomy.

Collateral reading: Quain's Anatomy, Spalteholz's Anatomy, Piersol's Anatomy, Taylor's Applied Anatomy, Wiedersheim's Structure of Man, Morris' Anatomy.

HISTOLOGY AND EMBRYOLOGY.

H. W. LAWSON, M.S., M.D....Professor of Histology and Embryology
E. B. JONES, M.D.....Instructor
CLARA S. LUDLOW, Ph.D.....Instructor

Instruction is given in the care and use of the microscope and in the preparation of tissues for microscopical examination, and a systematic study is made of the minute structure of the tissues and organs of the body, the laboratory work being supplemented by lectures and recitations.

A combined lecture, recitation, and laboratory course is given in embryology. The written and oral examinations at the end cover both subjects.

Text-books: Böhm, Davidoff, and Huber's Histology, Bryce's Embryology.

Collateral reading: Nichol's Histology, Stöhr's Histology, Bailey and Miller's Embryology.

PHYSIOLOGY.

SHEPHERD IVORY FRANZ, Ph.D.....Professor of Physiology
H. C. ELLIOTT, M.D.....Associate in Physiology
TRUMAN ABBE, M.D.....Instructor in Physiology

The course in Physiology consists of lectures, recitations, conferences, demonstrations, and laboratory exercises, during the second half of the first year. The lectures cover all the important facts and theories regarding bodily functions, and are illustrated by diagrams, models, and prepared specimens. Recitations are held on assigned parts of the text-book. Conferences are held on special physiological topics, and for these exercises each student is required to prepare one thesis during the semester. In the laboratory each student performs a number of experiments on blood, on the circulation, on digestion, on the general functions of muscle and nerve, on the nervous system, and on the special senses. The student is required to make and keep records of

the experiments, and these are criticised by the instructors. The class is divided into sections so that each student receives a large amount of personal attention. In the second year a series of exercises is held in which special emphasis is laid on the relation of normal physiological function to the disturbances of function in disease, and upon the physiological action of drugs. It is intended in this way to bring the work of the Physiological Laboratory and other exercises into closer relation with the succeeding courses in Pathology, Therapeutics, and General Medicine.

Text-books: Tigerstedt's Physiology; Howell's Physiology.

Collateral reading: Schafer's Physiology, Landois' Physiology, American Text-book of Physiology, Stewart's Physiology.

CHEMISTRY.

CHARLES E. MUNROE, Ph.D....Professor of Chemistry and Toxicology

I. K. PHELPS, Ph.D.....Assistant Professor Physiological Chemistry

EDWARD G. SEIBERT, M.D....Associate in Chemistry and Instructor in

Ophthalmology

THOMAS M. PRICE, Ph.D.....Instructor in Biochemistry

OTIS D. SWETT, B.S.....Instructor in Chemistry

General Chemistry. A series of illustrated lectures accompanied by recitations, laboratory work, and exercises, on theoretical, inorganic, organic, and technical chemistry.

Organic Chemistry. A series of lectures, laboratory work, and recitations on the acyclic and cyclic hydrocarbons and their derivatives, with special reference to physiology and medicine.

Physiological Chemistry. A series of lectures, laboratory work, and recitations on the proximate principles of the human body.

Biochemistry. A laboratory course in the chemical examination of some of the chief foodstuffs, the tissues and fluids of the body, and the products of certain organisms; also the isolation of the digestive enzymes and a study of their action *in vivo*. DR. PRICE.

Clinical Chemistry. A thorough course is given in which material from the University Hospital and Dispensary is utilized to show the practical application of this subject in medicine.

Text-books: Holland's Medical Chemistry and Toxicology, Long's Text-book of Physiological Chemistry, Platt's Manual of Qualitative Analysis and Medical Chemistry.

Collateral reading: Simon's Manual of Chemistry, Hammarsten's Physiological Chemistry, Richter's Organic Chemistry, Barker's Text-book of Elementary Chemistry.

MATERIA MEDICA AND THERAPEUTICS.

THOMAS A. CLAYTOR, M.D.....	Professor of Materia Medica and Therapeutics
NOBLE P. BARNES, M.D.....	Instructor in Materia Medica
WALTER H. MERRILL, M.D.....	Instructor in Electro-Therapeutics
B. M. RANDOLPH.....	Instructor in Pharmacology

Second year. (1) Lectures upon Materia Medica, including a demonstration of drugs and their preparations. (2) Recitations upon the preparations, their doses, and the various antidotes for poisons. (3) Practical exercises in prescription writing. (4) Demonstrations in the drugs. (5) An optional course in Pharmacy is offered.

Third year. (1) Systematic lectures upon the physiological action of drugs and their effects in health and disease, their therapeutic uses, and their methods of administration. (2) Lectures and section demonstrations in electro-therapeutics. (3) Prescription writing, in which the students are given hypothetical cases for which to prescribe, the prescriptions being reported before the class for criticism and discussion.

Collateral reading: Hare's Practical Therapeutics, Culbreth's Materia Medica and Pharmacy, Cushney's Pharmacology, Osborne's Introduction to Pharmacology and Medicine, Sollman's Text-book of Pharmacology, Forcheimer's Prophylaxis and Treatment of Internal Disease.

DIETETICS.

J. B. NICHOLS, M.D.....	Associate in Medicine
-------------------------	-----------------------

A course of lectures and quizzes on the principles of feeding in health and disease.

PATHOLOGY AND BACTERIOLOGY.

JOSEPH J. KINYOUN, M.D, Ph.D.....	Professor of Bacteriology and Pathology
WILBUR R. BRANDENBURG, M.D.....	Associate in Bacteriology and Pathology
ARTHUR L. HUNT, M.D.....	Instructor in Bacteriology and Pathology

Bacteriology. The first part of the session is devoted to a laboratory course of instruction in the fundamental principles and methods of pure bacteriology. A thorough drilling is given in the preparation of culture media, in sterilization and disinfection, staining, and in the several methods of differentiating bacteria. The course will continue over six weeks.

Pathology. The course in Pathology will be given in the second and third years, and will comprise in general, special pathology, and clinical microscopy. The second year will be devoted to the study of the prin-

ciples of general pathology and of the several processes observed in disease. Post-mortem examinations will be utilized when possible. Coincidentally with the above will be included the study of the principal pathogenic bacteria: the principles of immunity and serum therapy.

During the third year will be given a course of instruction in special pathology, which will include the study of those processes requiring surgical relief; the healing of wounds and other injuries; of special diseases, neoplasms, and problems of experimental pathology.

The course in Clinical Microscopy will comprise the study and examination of various tissues, fluids, and material from the standpoint of diagnosis.

Text-books: Bacteriology, Jordan; Pathology, Delafield and Prudden.

Collateral reading: Ziegler's Pathological Anatomy, Adami's Pathology, Park's Pathogenic Bacteria and Clinical Diagnosis, Simon and Von Jasch.

MORBID ANATOMY.

I. W. BLACKBURN, M.D.....Professor of Morbid Anatomy

The instruction in this course is mainly practical, consisting of post-mortem examinations, demonstrations, and illustrative lectures pertaining to the subjects of morbid anatomy and special pathology. Especial attention is paid to the study of the gross pathology of diseases of the brain and nervous system. Instruction in the technique of post-mortem examinations for scientific purposes and in medico-legal cases is a feature of the course.

MEDICINE.

STERLING RUFFIN, M.D.....Professor of Medicine
 GEO. N. ACKER, A.M., M.D.....Clinical Professor of Medicine
 THOS. A. CLAYTOR, M.D.....Clinical Professor of Medicine
 WILLIAM A. WHITE, M.D..Professor of Mental and Nervous Diseases
 J. B. NICHOLS, M.D.....Associate in Medicine
 H. H. DONNALLY, A.M., M.D.....Associate in Medicine
 W. W. WILKINSON, M.D.....Instructor in Medicine
 CHARLES W. HYDE, M.D.....Instructor in Medicine
 SOTHORON KEY, M.D.....Instructor in Medicine
 C. B. CONKLIN, M.D.....Instructor in Medicine

Instruction in Medicine is so given as to conform to the most modern requirements. The work begins in the second year with a complete course in history-taking and normal physical diagnosis, and is continued through the third and fourth years. During the latter two years the course consists of lectures, recitations, a study of case histories, clinical conferences, and practical work in the clinical laboratory and at the bedside. The work is made as practical as possible.

The third-year class is divided into small sections which are required to attend the daily dispensary service in the University Hospital, where they are drilled especially in history-taking and in the technique of practical physical diagnosis.

The fourth-year class is similarly divided into small sections, and these are required to attend the daily ward clinics in the University Hospital and ward clinics in the Garfield Memorial Hospitals, Children's Hospital, and the Tuberculosis Hospital of the District of Columbia.

The system of ward clinics to small groups of students affords a most effective method of studying disease and gives to every student an opportunity of following a large assortment of diseases from their commencement to the termination of illness: in no other way is it possible to get a more practical knowledge of the methods of studying disease or a more intimate knowledge of disease itself.

Every patient in the medical wards of the University Hospital is assigned to two senior students, who are required (under proper supervision) to take the history, to make and record a complete physical examination, to determine after due study the nature of the illness (diagnosis), to outline a plan of treatment, and to make daily notes of the progress of the case.

A weekly amphitheater clinic is given to third-year students in a body and a similar clinic to the fourth-year class. A series of special neurological clinics is provided for the senior class at the Government Hospital for the Insane, where there is a great wealth of material.

Text-books and works of reference: Osler's, Tyson's or Anders' Practice of Medicine; Manson's Tropical Diseases; Church and Peterson's Nervous and Mental Diseases; Cabot's Physical Diagnosis; Brown and Ritchie's Medical Diagnosis; Sahli's Diagnostic Methods; Simon's or Boston's Clinical Diagnosis; Cabot's Clinical Examination of the Blood; Osler's Modern Medicine; Nothnagel's Encyclopedia of Practical Medicine.

TROPICAL MEDICINE.

C. S. BUTLER, M.D., Surgeon U. S. Navy... Instructor in Bacteriology and Tropical Diseases, U. S. Navy Medical School

The course in tropical diseases is similar to that given in the Army and Navy Medical Schools, and consists of didactic lectures, quizzes, and laboratory instruction, with particular reference to the parasitic, protozoal diseases common in the tropics and in the southern part of the United States.

Text-book: Manson's Tropical Diseases.

MENTAL DISEASES.

WILLIAM A. WHITE, M.D.....Professor of Mental Diseases

A series of lectures and clinics is given upon the subject of insanity in its various forms.

Many of these clinics are given at the Government Hospital for the Insane, which, with its more than two thousand beds, affords one of the largest clinics in this country.

Text-book: White's Outlines of Psychiatry.

Collateral reading: Paton's Psychiatry; Kraepelin's Clinical Psychiatry.

PEDIATRICS.

GEORGE N. ACKER, A.M., M.D.....Professor of Pediatrics

FRANK FREMONT-SMITH, M.D.....Associate in Pediatrics

EDGAR P. COPELAND.....Associate in Pediatrics

Didactic and clinical lectures are given upon diseases of infants and children and the importance of the proper management of these diseases by diet and hygiene.

The children's clinic, at the Children's Hospital, affords ample material for practical teaching in this branch.

DERMATOLOGY.

H. C. YARROW, M.D.....Professor of Dermatology

R. B. CARMICHAEL, M.D.....Clinical Professor of Dermatology

The lectures on this subject are illustrated by diagrams, models, photographic illustrations of disease from life, and also by the exhibition of cases. In connection with the course clinical instruction is given.

Text-book: Jackson's Diseases of the Skin.

PHYSICAL DIAGNOSIS.

W. W. WILKINSON, M.D.....Associate in Medicine

A complete course is given in this subject by means of recitations, section work on normal subjects, and with clinical cases which typically represent diseased conditions.

The text-books are those given under the general subject of medicine.

SURGERY.

WILLIAM CLINE BORDEN, M.D.....Professor of Surgery

JOHN VAN RENSSELAER, A.B., M.D.....Clinical Professor of Surgery

A. R. SHANDS, M.D.....Professor of Orthopedic Surgery

ARTHUR A. SNYDER, M.D.....Clinical Professor of Surgery

FRANCIS R. HAGNER, M.D.....	Professor of Genito-Urinary Surgery
JOHN R. WELLINGTON, M.D.....	Clinical Professor of Surgery
CHARLES S. WHITE, M.D.....	Associate in Surgery
W. F. M. SOWERS, A.B., M.D.....	Associate in Surgery
H. W. LAWSON, M.D.....	Associate in Surgery
L. H. REICHELDERFER.....	Clinical Associate in Surgery
DUFF G. LEWIS.....	Clinical Associate in Surgery
JOHN T. KELLY.....	Clinical Associate in Surgery
J. LAWN THOMPSON, M.D.....	Instructor in Surgery
A. L. HUNT, M.D.....	Instructor in Surgery
E. T. M. FRANKLIN, M.D.....	Assistant in Surgery
L. M. HYNSON, M.D.....	Assistant in Surgery

The principles of surgery are presented in a systematic course of lectures, so that the student may obtain a comprehensive and adequate concept of the science and art of surgery. These lectures are followed by recitations held twice a week, so that the subject-matter may be thoroughly impressed upon the students. The special divisions of surgery are taught by associates and instructors who have made specialties of these branches. The clinical material in the University Hospital and Dispensary, being under the control of the faculty, is directly used throughout the course to illustrate the subjects taught and to familiarize the students with actual clinical conditions.

Surgical technique is taught by instruction in the preparation of materials used in antiseptic and aseptic surgery, the preparation of the patient, and the sterilization of instruments. Practical instruction is given in the Hospital and Dispensary in the application of splints, bandages, and dressings used in the various surgical diseases and injuries. Thorough instruction and practical demonstrations are given in the administration of anæsthetics. Surgical pathology is taught by thorough instruction in the gross and microscopic appearance of surgical diseases and injuries, and by a systematic course of lectures and quizzes by which the etiology, pathology, symptomatology, and treatment of the surgical affections and their relations to each other are shown.

Clinical teaching is carried on in the University Hospital and Dispensary, and in other hospitals of the city to which members of the faculty are attached. Amphitheater clinics are given, in which the general practice of surgical diagnosis and operative technique and therapeutic procedure are shown.

Ward clinics and bedside instruction are made a prominent part of the course. The class is divided into sections, which are regularly assigned to clinical work in the University Hospital and Dispensary, and in other hospitals. Students are assigned to work in the surgical outpatient departments of the different hospitals, and practical work is

required of each student in the preparation of dressings, sterilization of instruments, etc.

In the fourth year a thorough course is given in surgical anatomy and operative surgery of the cadaver, in connection with which the instructor takes up a general review of anatomy, so that the student may be thoroughly prepared for State Board examinations for graduation.

Orthopedics. A course of lectures and recitations on the pathology, etiology, course, termination, and treatment of chronic joint diseases, with clinical instruction in the application of special apparatus and of plaster of paris to the correction of deformities.

Instruction in genito-urinary surgery and in cystoscopy is given in clinics in section work and by recitations from text-book.

OBSTETRICS.

A. F. A. KING, A.M., M.D., LL.D.....	Professor of Obstetrics, Dean Emeritus
EDWARD E. MORSE, M.D.....	Associate in Obstetrics
JULIAN M. CABELL, M.D.....	Associate in Obstetrics
H. S. MEDFORD, M.D.....	Instructor in Obstetrics

The course in Obstetrics comprises a series of lectures on the science and art of midwifery, together with practical work. The chief purpose of the lecturer is to arrange, simplify, and explain the matters studied in the text-books so as to render them more easily intelligible and to indicate their relative importance. The lectures are illustrated by diagrams, models, manikins, natural preparations, and instruments. The class is divided into sections, and each student performs various obstetrical operations upon the manikin and receives practical instruction in external pelvimetry and the methods of abdominal palpation and auscultation during pregnancy. Recitations from text-books are held throughout the term. In the fourth year clinical instruction in obstetrics is given, the class being divided into small sections and each section being required to attend a stated number of cases.

Text-book: King's Manual of Obstetrics.

Collateral reading: Hirst's Obstetrics, Williams' Obstetrics, Jewett's Practice of Obstetrics.

GYNECOLOGY.

J. WESLEY BOVÉE, M.D.....	Professor of Gynecology
G. BROWN MILLER, M.D.....	Associate in Gynecology
A. L. STAVELY, M.D.....	Clinical Professor of Gynecology
W. A. FRANKLAND, M.D.....	Instructor in Clinical Gynecology
J. LEWIS RIGGLES, M.D.....	Instructor in Gynecology

Gynecology as taught in the third year comprises a course of lectures and text-book recitations. In the fourth year the class is taken in sections of one to two students each into the Gynecological Dispensaries for clinical instruction in examinations, diagnosis, and treatment. In larger sections the class attends amphitheater clinics given by the Professors of Gynecology and Clinical Gynecology.

Text-books: Bovee's Practice of Gynecology, Hirst's Diseases of Women.

Collateral reading: Dudley's Gynecology, Penrose's Diseases of Women, Ashton's Practice of Gynecology, Montgomery's Text-book of Gynecology, Findley's Medical Gynecology.

LARYNGOLOGY AND OTOTOLOGY.

CHARLES W. RICHARDSON, M.D.. Professor of Laryngology and Otology
O. A. M. McKIMMIE, M.D.....Instructor in Laryngology and Otology
H. S. DYE, M.D.....Instructor in Laryngology and Otology

This course comprises lectures and clinical instruction on diseases of the nasal passages, pharynx, larynx, and also the ear. Practical demonstrations are given in the use of the laryngoscope and other instruments required in these special branches.

Text-books: Kyle's Diseases of the Nose and Throat, Dench's Diseases of the ear.

OPHTHALMOLOGY.

D. KERFOOT SHUTE, A.B., M.D.. Associate Professor of Ophthalmology
W. K. BUTLER, M.D.....Associate Professor of Ophthalmology
E. G. SEIBERT.....Instructor in Ophthalmology

The course of lectures on this subject is to direct attention to the elementary principles of the subject. It is not intended to qualify the student as a specialist, but to give him a knowledge of what every general practitioner ought to know. The course is supplemented by clinical instruction.

Text-books: May's Diseases of the Eye, Fuch's Diseases of the Eye, Ball's Diseases of the Eye.

HYGIENE.

D. W. PRENTISS, M.D.....Professor of Hygiene

The course in Hygiene is given principally by recitation from a prescribed text-book. Consideration is given to domestic and municipal sanitation and to the principles underlying legislative interference in matters of public health.

Text-book: Harrington's Hygiene.

Collateral reading: Notter and Firth's Hygiene.

MEDICAL JURISPRUDENCE.

W. C. WOODWARD, M.D.....Professor of Medical Jurisprudence

This course is designed to familiarize students with the rights and obligations of physicians, both legal and ethical, and to qualify them to apply the facts of medical science to the solution of problems in law.

Text-book: Reese's Medical Jurisprudence and Toxicology.

CLINICAL FACILITIES.

The following hospitals are open to the students of this school for clinical study, and are extensively used for that purpose:

University Hospital, H St., between Thirteenth and Fourteenth Sts., N. W., and adjacent to the Medical Building.—This hospital is a part of the educational equipment of this University, and is used primarily in instructing the students in clinical medicine, surgery, and obstetrics. It has also in connection with it an out-patient or dispensary service in all departments.

The staff is composed of Members of the Faculty of Medicine.

Garfield Memorial Hospital, Florida Ave. and Tenth St., N. W.—This institution has 118 charity beds. Clinics are given regularly throughout the session by members of the Faculty connected with the visiting staff of the hospital. There is also an out-patient department, giving good opportunities for experience in the practice of physical diagnosis.

Members of the Faculty on the visiting staff: Professor CLAYTOR, Clinical Medicine; Professors VAN RENSSELAER, SNYDER, WELLINGTON and REICHELDERFER, Clinical Surgery; Professor STAVELY, Clinical Gynecology; Professor CARMICHAEL, Clinical Dermatology; Professors SHUTE and BUTLER, Clinical Ophthalmology; Professor HAGNER, Clinical Genito-Urinary Surgery; Professor YARROW and Dr. FREMONT-SMITH, Consulting Physicians.

Children's Hospital, W St., between Twelfth and Thirteenth Sts., N. W.—Regular clinical instruction is given in the medical and surgical wards by members of the Faculty on the visiting staff of the hospital. This institution has 100 charity beds. There is also a large out-patient department.

Members of the Faculty on the visiting staff: Professors KING and YARROW, Consulting Physicians; Professor WELLINGTON, Clinical Surgery; Professor ACKER and Drs. COPELAND and FREMONT-SMITH, Clinical Medicine.

Emergency Hospital and Central Dispensary, Fifteenth St., and Ohio Ave., N. W.—This hospital has 36 charity beds, and has a very large out-patient service. The large emergency service gives exceptional facilities in clinical surgery.

Members of the Faculty on the visiting staff: Professor HAGNER, Clinical Genito-Urinary Diseases; Professor RUFFIN, Consulting Physician; Drs. WHITE and JACKSON, Surgery; Dr. ELLIOTT, Clinical Medicine; Professor CARMICHAEL, Clinical Dermatology; Dr. MILLER, Clinical Gynecology; Professor SHANDS, Orthopedics; Professor SHUTE, Ophthalmology; Dr. FRENCH, Pediatrics.

Columbia Hospital for Women, Twenty-fifth St. and Pennsylvania Ave., N. W.—This hospital has 68 charity beds for diseases peculiar to women and 50 charity maternity beds. Both the obstetrical and the gynecological services are particularly good.

Members of the Faculty on the visiting staff: Professor BOVEE and Dr. MILLER, Clinical Gynecology; Drs. MORSE and CABELL, Clinical Obstetrics; Professor SHUTE, Ophthalmology; Professor RUFFIN, Visiting Physician.

Providence Hospital, Second and D Sts., S. E.—This institution has a large charity service—100 beds for medical and surgical cases and 30 maternity beds.

Members of the Faculty on the visiting staff: Professor RICHARDSON, Clinical Laryngology and Otology; Professor SHUTE, Clinical Ophthalmology; Dr. SOWERS, Clinical Surgery; Professor CARMICHAEL, Dermatology; Dr. MORSE, Obstetrics.

The Government Hospital for the Insane.—This hospital is maintained by the United States Government. It has 2500 beds. Clinical instruction in mental diseases is given by the superintendent of the hospital, Professor W. A. WHITE. Other members of the Faculty on service at this hospital are Professors FRANZ and BLACKBURN; Professor SHUTE, Consulting Ophthalmologist; Professor RUFFIN, Consulting Physician.

Episcopal Eye, Ear, Throat, and Nose Hospital, Fifteenth St., between L and M Sts., N. W.—Excellent opportunities for clinical instruction in ophthalmology, otology, laryngology, and rhinology are offered by this hospital.

Members of the Faculty on its staff: Professor RICHARDSON, Clinical Otology and Laryngology; Drs. McKIMMIE and DYE, Clinical Otology and Laryngology; Professor ACKER, Consulting Physician.

Lutheran Dispensary, Fourteenth and N Sts., N. W.—This dispensary affords good opportunities for clinical study of diseases of the eye, ear, throat, and nose.

Members of the Faculty on its staff: Professor BUTLER, Surgeon-in-Charge; Dr. SEIBERT, Ophthalmology; Professor ACKER, Consulting Physician.

Casualty Hospital, 708 Massachusetts Ave., N. E.—Opportunities in emergency and dispensary work are offered by this institution.

Members of the Faculty on its staff: Professor ACKER, Consulting Physician; Dr. BARNES, Clinical Medicine; Dr. MEDFORD, Obstetrics.

Woman's Clinic, 1237 T St., N. W.—Members of the Faculty on its staff: Professor YARROW, Consulting Physician; Professor SNYDER, Attending Surgeon.

Tuberculosis Hospital, 14th and Upshur Sts., N. W.—Members of the Faculty on its staff: Professor CLAYTOR and Dr. RANDOLPH, Clinical Medicine; Professor KINYOUN, Pathology; Dr. REICHELDERFER, Clinical Surgery; Professor RICHARDSON, Ophthalmology.

EXAMINATIONS.

Examinations are held at the end of the course in each subject. Students failing in examination will be permitted to be re-examined at the next regular examination period. Students failing in re-examination must repeat the subjects in which they do not attain a grade of 85 or more. Students failing to appear at the regular examinations will not be examined until the next regular examination, except by special permission of the Faculty, and in this event an extra fee of \$5.00 will be charged. Students failing to pass satisfactorily their practical laboratory examinations will be required to repeat the laboratory courses and pay the regular laboratory fees. Students will not be admitted to examination unless they have paid all fees due at the time or present a permit signed by the Treasurer. In order to avail themselves of the privilege of re-examination students must file their applications with the Dean not later than fifteen days before the date set for the examinations.

In addition to the foregoing examinations students are required: To dissect satisfactorily one lateral half of a cadaver; to report satisfactorily an analysis of specimen of urine and a clinical examination of a specimen of blood; to examine and report upon six clinical cases in general medicine and two cases in surgery; to perform satisfactorily two major surgical operations upon the cadaver;

to work not less than two weeks in the Dispensary Service of the University or other hospitals; to work not less than two weeks in the Clinical Laboratory of the University or of some other hospital approved by the Dean; to take charge of one or more obstetrical cases and to report thereon; to examine and report on one case in either ophthalmology, laryngology, otology, dermatology, or orthopedics; to report upon one case in gynecology.

Proficiency is marked upon a scale of 100. A grade of 75 is required to pass an examination.

Students do not receive their numerical grades, but are notified that they have attained grades A, B, C, D, E, or F, as the case may be. A signifies 96 to 100; B signifies 90 to 95; C signifies 85 to 89; D signifies 75 to 84; E signifies failure; F signifies failure to appear for examination.

REQUIREMENTS FOR DEGREES.

Every candidate for the degree of Doctor of Medicine must be at least twenty-one years of age and of reputable character. He must have complied with the admission examination and other requirements herein set forth. He must file with the Dean, at least 30 days before the dates fixed for conferring of degrees, a notice of his intention to appear for graduation, and he must be present at the time specified for examination, and also at Commencement or Convocation. The degree is not conferred in the absence of a candidate except by special consent of the President's Council. Graduates of other accredited colleges must spend one year in residence at this school.

To be eligible for graduation the candidate must pass all his examinations.

Candidates who in their work and examinations attain general averages of 90 or more will be presented to the Faculty for consideration with reference to being designated as "having graduated with distinction." If in the opinion of the Faculty such candidates have shown themselves to be possessed of more than ordinary merit, they will have inscribed upon their diplomas beneath their degree the words "with distinction," and the names of such graduates will be distinctly printed at the head of the list of graduates of the year.

Candidates who have completed their courses, but have not passed their final examinations, may take the fall or the winter re-examinations upon payment of a fee of \$10, and, if successful, receive their diplomas at the Fall or Winter Convocation, as the case may be, upon the payment of the diploma fee.

A student who has failed of graduation after repeating his final year will not be permitted to maintain his connection with the school.

SCHOLARSHIPS.

Eight scholarships are provided for students.

CORCORAN SCHOLARSHIPS.—In recognition of the liberality of the late W. W. Corcoran, the University has established in this department six free scholarships.

Two of these scholarships are open for competitive examination to the graduates of the several high schools of the District of Columbia and are awarded to the two students whose averages are highest.

Two scholarships are open for competitive examination to graduates of any reputable high school or college who shall give satisfactory written evidence of pecuniary inability and certificates of good moral character and industry. These two scholarships are awarded to the two graduates whose averages are highest.

The remaining two scholarships are open for competitive examination to students who, though not graduates of any high school or college, give satisfactory evidence that they are fitted by previous education for the study of medicine, and at the same time give satisfactory written evidence of pecuniary inability and certificates of good moral character and industry. These two scholarships are awarded to the two students whose averages are highest.

In establishing these averages professional aptitude and general qualifications are considered along with scholastic ability.

MEDICAL MISSIONARY SCHOLARSHIPS.—Two Medical Missionary Scholarships will be given to such applicants as are judged by the President of the University best qualified to enter upon the study of medicine for the purpose of becoming medical missionaries. These scholarships are awarded for one year only, but they may be renewed.

Applications for scholarships should be filed with the Dean not later than September 10. Students holding scholarships pay the matriculation, library, laboratory, and graduation fees, and make the deposit to cover breakage. Holders of scholarships must also maintain a satisfactory scholastic average.

PRIZES.

A general examination prize of \$50 is annually awarded to the candidate for graduation who attains the highest average grade in all subjects.

Professor H. C. YARROW gives a prize for the best examination in Dermatology.

Professor CHARLES W. RICHARDSON gives a prize for the best examination in Laryngology and Otology.

Professor ACKER gives a prize for the best examination in Pediatrics.

Professor BUTLER gives a prize for the best examination in Ophthalmology.

Professor HAGNER gives a prize for the best examination in Genito-Urinary Diseases.

HOSPITAL APPOINTMENTS.

The interns are annually appointed in the University Hospital. They are appointed from graduates who have served as externs. Seven externs are also appointed from graduates and from the fourth-year class. These appointments are made upon competitive examinations under conditions determined by the governing authorities of the Hospital. Appointments to similar positions are open to the graduates and undergraduates of this school in the following other hospitals of the city: Garfield Memorial Hospital, Emergency Hospital, Columbia Hospital for Women, Casualty Hospital, Providence Hospital, Washington Asylum Hospital, Children's Hospital, Episcopal Eye, Ear, Throat, and Nose Hospital.

FEES AND CONTINGENT EXPENSES.

1. Matriculation fee (payable once).....	\$5
2. Annual library fee	2
3. Tuition fee per annum, including all charges for materials....	150
4. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, excepting for courses which do not begin with the terms	2
5. Fee for graduation	10
6. Tuition fee per annum for any year repeated once, or for a fifth year	75
In addition to the tuition fees for special or repeated laboratory courses, a charge will be made for materials used.	
7. Fee for a certificate under the seal of the University.....	2
8. Auditors are admitted to lecture courses for the regular tuition fees, but are not permitted to take active part in the work of the classes, and will not be allowed credit, in a subsequent course of studies leading to a degree, for attendance as auditors. No matriculation or library fee is charged.	

No change will be made in the fees fixed at registration except in case of withdrawal, and then only upon notice in due form, and from the end of the current quarter session, when such withdrawal shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form to be obtained from the Registrar, and will be received only at the end of a quarter session.

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them from the University at the following rates:

Microscope for Histological Laboratory use.....	\$3
Microscope for Bacteriological, Pathological, and Clinical Microscopy Laboratory use	5

PAYMENT OF FEES.

All fees are to be paid to the Treasurer. Tuition fees are payable quarterly, in advance. Matriculation, library, and laboratory fees are payable in full, in advance.

WITHDRAWALS.

A certificate of work actually done will be given to any student wishing to withdraw or transfer to some other school during the session. Written notice of such withdrawal or transfer must be filed with the Dean at the time of requesting the certificate, and the student must have paid all fees and dues chargeable against him up to the end of the quarter in which he withdraws.

COMMITTEE ON EMPLOYMENT FOR STUDENTS.

Chairman.

THE SECRETARY OF THE UNIVERSITY.

DEAN WILBUR,

PROFESSOR HENNING,

DEAN HODGKINS,

PROFESSOR HOUGH.

The purpose of this Committee is to aid students, especially those coming from a distance, to obtain suitable employment as a means of defraying a part or all of their expenses while in pursuit of their college course. Opportunities for such employment in Washington are exceptionally good. The many Departments of Government, the Library of Congress, Congressmen's secretaryships, law offices, contractors' and architects' offices, night schools, journalism, stenography, etc., offer a large number of positions of the most diverse kinds. While the Committee must not be understood as in any sense engaging to find employment for prospective students, in a great many cases important assistance can be rendered duly qualified applicants, if the fact of their desire to obtain employment is known. Applicants are particularly cautioned against coming to the University, intending to depend upon outside employment for support, without being provided with funds sufficient

to meet the expenses of at least the first half year. Communications should be addressed to the

*Committee on Employment for Students,
The George Washington University,
Washington, D. C.*

BOARD AND ROOMS.

A register of approved boarding houses is kept by the Treasurer. Accommodations cost from \$25 to \$40 a month.

For catalogues, application blanks, and further information, address

THE DEAN,
*Department of Medicine,
The George Washington University,
1325 H St., N. W., Washington, D. C.*

DEPARTMENT OF DENTISTRY.

FACULTY.

- CHARLES WILLIS NEEDHAM, LL.D.....PRESIDENT OF THE UNIVERSITY
 J. ROLAND WALTON, D.D.S.....Professor of Prosthetic Dentistry
 and Orthodontia, and Dean,
 702 10th St., N. W.
- HENRY C. THOMPSON, D.D.S.....Professor of Operative Dentistry
 D. KERFOOT SHUTE, A.B., M.D.....Professor of Anatomy
 CHARLES E. MUNROE, Ph.D.....Professor of Chemistry
 THOMAS A. CLAYTOR, M.D.....Professor of Materia Medica and
 Therapeutics
- SHEPHERD IVORY FRANZ, Ph.D.....Professor of Physiology
 J. J. KINYOUN, M.D., Ph.D...Professor of Pathology and Bacteriology
 CHARLES S. WHITE, M.D.....Professor of Oral Surgery
 HURON W. LAWSON, M.D....Professor of Histology and Embryology
 JONATHAN R. HAGAN, D.D.S...Assistant Professor of Materia Medica
 ISAAC KING PHELPS, M.D., Ph.D..Assistant Professor in Physiological
 Chemistry
- E. G. SEIBERT, M.D.....Associate in Chemistry
 J. R. DEFARGES, D.D.S..Associate Professor of Metallurgy, Professional
 Ethics, Dental Jurisprudence, and Economics
- ALLEN S. WOLFE, D.D.S....Associate Professor of Crown and Bridge
 Work and Porcelain
- CHARLES BASSETT, D.D.S.....Associate Professor in Charge of the
 Dental Infirmary
- CADMUS LINDEN ODOR, D.D.S.....Associate Professor of Operative
 Technics and Comparative Anatomy
- W. FRANCIS LAWRENCE, D.D.S.....Associate Professor of Prosthetic
 Technics
- NOBLE P. BARNES, M.D.....Lecturer on Materia Medica
 S. H. GREENE, JR., M.D.....Instructor in Anatomy
 J. L. RIGGLES, M.D.....Instructor in Anatomy
 OTIS D. SWETT, M.S.....Instructor in Chemistry
 C. P. SHOEMAKER, D.D.S.....Instructor in Orthodontia Technics
 J. WINSLOW TAYLOR, D.D.S.....Instructor in Prosthetic Technics
 HENRY CISSEL YOUNG, D.D.S.....Instructor in Prosthetic Technics
 HERBERT C. HOPKINS, D.D.S.....Instructor in Operative Technics
 GEORGE B. HEINECKE, M.D.....Assistant Demonstrator of Anatomy
 W. A. FRANKLAND, M.D.....Assistant Demonstrator of Anatomy
 M. E. HARRISON, D.D.S.....Assistant Demonstrator in the Infirmary
 EWING MARVIN WOOD BEAR, D.D.S.....Assistant Demonstrator in the
 Infirmary

GENERAL STATEMENT.

The first course of lectures in the Dental School began November, 1887, under the title of "The Columbian University Dental Department." The course then extended over two years of five months each. Two years later the course was extended to seven months; but, this additional time being found inadequate to keep pace with the ever-increasing demand for higher dental education, the course was gradually increased, until now it extends over three years of eight months each.

The academic year begins on the last Wednesday in September and ends on the second Wednesday in June. The next session will begin September 29, 1909. Students should register promptly at the office of the Dean at the beginning of the session, and no student can be received and credited with a full term after ten days from the first lecture. Final examinations are held at the conclusion of the instruction in each subject. The degrees are conferred at Commencement, the first Wednesday in June, the Fall Convocation, and at the Winter Convocation, February 22. For further information communicate with the Dean of the Dental Department or the Secretary of the University.

ADMISSION.

Candidates for matriculation must show that they are fitted by previous education to study dentistry. For this purpose they must present a satisfactory certificate of their attainments from an approved school or college, or they must pass an examination.

Candidates are admitted without examination:

(1) Upon presenting a diploma or certificate of a reputable college conferring on them the degree of A.B. or B.S., or an equivalent degree in the arts and sciences.

(2) Upon presenting a diploma or certificate of graduation from a high school, academy, or preparatory school approved by the University as maintaining an adequate standard.

(3) Upon presenting a certificate of admission to the Freshman class of an approved college.

(4) Upon presenting a certificate of admission to another dental school approved by the University as maintaining an adequate standard.

Candidates unable to comply with the foregoing requirements are admitted upon passing an examination based upon the general requirement for admission to the fourth-year high school or its equivalent, modified to meet the regulations of State Dental Boards.

The scope of the different subjects is indicated in standard high school text-books.

A candidate may offer certificates of an approved school for work done in any preparatory subjects, and will be credited with the units represented by such work. A candidate failing to pass in two of the subjects of his examination may be admitted to the first year upon the condition that he make up the deficiency before entering the second-year class. The examinations are conducted by examiners appointed by the Superintendent of Schools of the District of Columbia.

The examinations for admission will be held in June and September, at the Dental Department. An applicant deficient in either Latin or Physics, or both, may be admitted to the first-year class conditioned in those subjects, but such conditions must be made up during the first year.

COURSE OF INSTRUCTION.

The course of instruction extends through three years of eight months each. The subjects taught during the course are divided as follows:

First Year.	Second Year.	Third Year.
Anatomy. Physiology. General Chemistry. Histology. Operative Technics. Prosthetic Technics. Special Anatomy.	Organic Chemistry. Operative Dentistry. Prosthetic Dentistry. Pathology. Materia Medica. Operative Technics. Prosthetic Technics. Infirmary Practice. Bacteriology. Dental Histology. Orthodontia Technics.	Operative Dentistry. Orthodontia. Prosthetic Dentistry. Comparative Dental Anatomy. Oral Surgery. Orthodontia Technics. Metallurgy. Prosthetic Technics. Infirmary Practice. Dental Therapeutics. Dental Pathology. Dental Bacteriology. Dental Jurisprudence, Economics and Ethics.

These studies are further described in the following pages.

PROSTHETIC DENTISTRY AND ORTHODONTIA.

J. ROLAND WALTON, D.D.S.....Professor
C. P. SHOEMAKER, D.D.S.....Instructor in Technics

1. Prosthetic Dentistry. All branches in this department will be under the supervision of the professor. He will deliver the lectures and

manage in person and through his assistants the quiz work and course of instruction. This system will prevent confusion in method and technical procedures.

2. Orthodontia. Junior year Orthodontia is a technical course with lectures and demonstrations. The Senior year is a review of the Junior studies with advanced lectures upon the irregularities of the teeth, local and constitutional. Each student is required to make a number of appliances upon models and practically correct cases of irregularity.

OPERATIVE DENTISTRY, DENTAL ANATOMY AND PATHOLOGY.

HENRY C. THOMPSON, D.D.S.....Professor

This course embraces lectures on the special anatomy and physiology of the teeth. The origin, growth, and eruption of the teeth receive minute attention, and are illustrated as their importance demands.

The methods of treating, filling, and extracting teeth receive attention in the lecture-room, and are demonstrated clinically by proficient operators. Extended consideration is given to dental pathology and therapeutics. This chair has personal supervision of the department of Operative Technic.

CHEMISTRY.

CHARLES E. MUNROE, Ph.D.....Professor

E. G. SEIBERT, M.D.....Associate

OTIS D. SWETT, M.S.....Instructor

The instruction in this subject embraces:

A short discussion of the principles of Physics in their relation to Chemistry, the principle of chemical philosophy, and the laws of chemical combination.

A study of the elements, metallic and non-metallic; the preparation, properties, and reaction of their different compounds and their application in dentistry; Organic Chemistry, with special attention to those organic compounds that are of practical use; laboratory instruction in the determination of acids and bases, analyses of alloys, etc.

PHYSIOLOGY.

SHEPHERD IVORY FRANZ, Ph.D.....Professor

TRUMAN ABBE, A.B., M.D.....Instructor

ISAAC KING PHELPS, Ph.D.....Instructor

This subject is taught in lectures, recitations and laboratory exercises. In the lectures and recitations special emphasis is placed upon those parts of physiology that have a known bearing upon dental

medicine and surgery, especially digestion, secretion and the nervous system. Three laboratory periods a week during a semester give the students first-hand knowledge of the principal facts about the general functions of tissues, and the special functions of the nervous system, the special senses, the heart, circulation, digestion, and respiration.

ANATOMY.

D. KERFOOT SHUTE, A.B., M.D.....	Professor
W. O. OWEN, M.D.....	Associate Professor
S. H. GREENE, JR., M.D.....	Instructor
J. L. RIGGLES, M.D.....	Instructor
J. B. HEINECKE, M.D.....	Instructor
E. P. MAGRUDER, M.D.....	Instructor
D. S. BIRTWELL, M.D.....	Instructor
VERGIL B. JACKSON, M.D.....	Instructor

The instruction in Anatomy is given in a graded course of lectures, recitations from prescribed text-books, and especially by practical work in the dissection of the cadaver. The lectures are illustrated by the use of dry and wet dissections of the cadaver, by models, diagrams, charts, and sciopticon views.

Practical work in osteology and in dissection of the head are of fundamental importance. For the study of these subjects the class is divided into sections in order to make the instruction as practical as possible. The bones of the skeleton are placed in each student's hands, and he is instructed and quizzed upon all their important features.

MATERIA MEDICA AND THERAPEUTICS.

THOMAS A. CLAYTOR, M.D.....	Professor
JONATHAN R. HAGAN, D.D.S.....	Assistant Professor, Dental Materia Medica and Therapeutics
NOBLE P. BARNES, M.D.....	Lecturer on Materia Medica

Instruction in these subjects embraces:

The study of crude drugs and their preparations and the art of prescribing; the physiological action of drugs in the human system; the practical application of drugs and other therapeutical agencies to the prevention and cure of diseases and the relief of suffering, together with their antidotal relation to poisons.

The subject is taught by means of lectures, recitations, and blackboard illustrations, and is made practical to as great a degree as is compatible with a sufficiently thorough understanding of its principles.

In connection with this chair is a pharmaceutical laboratory, well equipped with modern appliances, in which are taught the making of

typical preparations of the Pharmacopœia, prescription writing, and the compounding of prescriptions.

Special attention is given to those drugs that are of most value in the practice of dentistry.

ORAL SURGERY.

CHAS. S. WHITE, M.D. Professor

Instruction in this subject will consist of didactic lectures, recitations, case histories, together with clinics at regular intervals.

The lectures will deal with surgical bacteriology and pathology, surgical technique, anesthesia, wounds, hemorrhage, shock, new growths, constitutional diseases, plastic operations upon the palate and face, dislocation and fracture of the maxillæ. Charts, diagrams, photographs and stereopticon slides will supplement the lectures.

In the clinics at the Emergency Hospital, illustrative cases will be shown. The students will be expected to attend such operations which pertain to this subject.

HISTOLOGY

HURON W. LAWSON, M.D. Professor

The course in Histology consists in a systematic presentation of the subject of the minute anatomy of the various parts of the body, especial attention being devoted to the histology of the teeth and neighboring structures. The subject is presented partly by systematic lectures, and more especially by the practical study by the individual students of actual specimens under the microscope. The methods of preparation of microscopical specimens are presented and practiced in the laboratory. The projection microscope, affording valuable aid in illustrating and presenting the subject, is constantly used.

BACTERIOLOGY AND PATHOLOGY.

J. J. KINYOUN, M.D., Ph.D. Professor

WILBUR R. BRANDENBERG, M.D. Associate

ADAM KEMBLE, M.D. Instructor

The course begins with a consideration of the principles involved in the process of sterilization by dry and moist heat, the relative value and mode of application of each, and an explanation of the construction of the apparatus employed for the purpose. The use and construction of the thermostat is taken up at the same time and the student taught how he can dispense with these costly appliances in emergencies.

The composition and modes of preparation of the various nutritive media are next considered, working formulas given, and the student required to prepare them at least once in the laboratory. This is fol-

lowed by a discussion of bacteria as a class, their position in the biological world, their classification, distribution, and the general and special characters that belong to them.

After this preparatory training the various methods in use for the isolation and study of bacteria are taught by practical demonstration and practiced by the students, after which the most important pyrogenic organisms are studied in detail, giving special attention to those found in the nasal and oral cavities.

The aim of the course is chiefly to afford the students an opportunity to become practically familiar with bacteriological working methods, and to enable them to isolate and identify the bacteria present in suppurative processes, as well as to comprehend intelligently the references to micro-organisms in the current professional literature of the day.

PROSTHETIC TECHNICS.

W. FRANCIS LAWRENCE, D.D.S.....Associate Professor Senior Year
J. WINSLOW TAYLOR, D.D.S.....Instructor Junior Year
HENRY CISSEL YOUNG, D.D.S.....Instructor Freshman Year

The technic laboratories are thoroughly equipped for their particular work. The course in prosthetic technics extends through the Freshman, Junior, and Senior years.

The first year is a technical and didactic course. The students are taught the proper equipment of a dental laboratory; the preparation of the mouth for dentures; methods of taking impressions of the mouth and manipulation of the various impression materials; the preparation and mounting of models; selection and artistic arrangement of teeth; the construction of plastic dentures and crowns with general details.

In the Junior class the course is a review of the Freshman year with extended technical and didactic work, embracing a practical course in the swaging of the various metals, as taking impressions, making models and dies, swaging, rimming, attaching teeth by rubber, and in general construction of metal dentures, crown and bridge work.

The Senior year is a practical course, embracing the swaging of plates, teeth attached by soldering, clasps, porcelain work, advanced bridge-work, removable bridges, and the detailed construction of all work in prosthetic dentistry.

The work of the department is under the immediate supervision of the associate professor.

METALLURGY.

J. R. DeFARGIS, D.D.S.....Associate Professor

The subject of Metallurgy taught in the chemical laboratory will be reviewed and an extended course will be given in metals, alloys, and amalgams which are used in dentistry.

PROFESSIONAL ETHICS, DENTAL JURISPRUDENCE AND ECONOMICS.

These lectures on ethics consist of a brief statement of the moral obligations of professional men to each other and to their patients and upholding the honor and dignity of the profession, the differences between the profession, business and manufacturing pursuits.

The lectures on jurisprudence will follow the text-book by Dr. Reh-fuss, which fully elucidates the legal relation of the dentist to his patients, the importance of dental records, the limitations of dental practice, the liabilities incurred by those who administer anesthetics, the penalties, etc.

Economics. This course will instruct the student in the proper methods to insure a practice and to retain patients; will discuss business relations between patients and dentists, fees, book and card systems, and the general economy in conducting an office.

THE DENTAL INFIRMARY.

CHARLES BASSETT, D.D.S.....Associate Professor in Charge
J. WINSLOW TAYLOR, D.D.S.....Demonstrator
HENRY CISSEL YOUNG, D.D.S.....Demonstrator

The Infirmary is open every week day for nine continuous months (being closed during the months of July, August, and September), during which time an abundance of clinical material is readily available. In fact, as many patients present themselves as can possibly be attended to by the students. It is under the immediate supervision of the Demonstrator in charge, who is present from 1 until 6 o'clock each week day.

OPERATIVE TECHNICS.

CADMUS L. ODOR, D.D.S.....Associate Professor
HERBERT C. HOPKINS, D.D.S.....Instructor

This subject is taught by lectures, illustrated by enlarged models and drawings, together with demonstrations of instruments and materials. The students perform exercises in manipulative procedure under the direction of the instructors.

The subjects embraced in the course consist, first, of the study of dental nomenclature, that the student may acquire an understanding of the technical terms used in the course of his dental studies. This is followed by descriptive dental anatomy and the forms and surface markings of each tooth studied, the natural teeth, as well as enlarged models and drawings, being used for the purpose. Each student is required to make various sections of the teeth for the thorough study

of the pulp chambers and root canals and their relations to the external surfaces of the teeth.

That tooth-forms may be more perfectly impressed upon the mind of the students, each one is required to carve a tooth of the several classes, as incisor, cuspid, bicuspid, and molar, in bone or artificial ivory, representing the actual form and size of the natural organ. Cavities are classified and illustrated by drawings and models, followed by their preparation and filling in technic forms by the student. Treating and filling root canals is given full attention, the students performing operations of this kind upon natural teeth mounted for the purpose.

All work, in its relation to operative dentistry, is given the necessary consideration to fit the student for meeting, as far as possible, the actual requirements of the infirmary. The operations in the technic department require a large number of natural teeth and a sufficient supply is difficult to obtain.

COMPARATIVE DENTAL ANATOMY.

The senior students will study in this course the food habits and the teeth of animals. The forms of teeth and their uses as weapons of offense and defense will be studied.

CROWN AND BRIDGE WORK, GOLD INLAY, AND PORCELAIN.

ALLEN S. WOLFE, D.D.S.....Associate Professor

Instruction in this course is systematically given by lectures and clinics. The course in technique extends through the Freshman, Junior, and Senior years.

Students are taught the principles and practice of inlay work, porcelain crowns, high and low fusing bodies, the use of the electric and gas furnaces.

TEXT-BOOKS AND WORKS OF REFERENCE.

(The works first named and in *italics* are preferred.)

Anatomy.—*Cunningham's Text-book of Anatomy*; *Cunningham's Manual of Practical Anatomy*; Dental Anatomy, Black's.

Physiology.—Raymond's Human Physiology; Howell's Text-book of Physiology; Tigerstedt's Text-book of Physiology.

Pathology and Bacteriology.—Delafield and Prudden's Pathology; Jordan's Bacteriology.

Chemistry.—*Simon's Chemistry*.

Materia Medica.—*H. C. Wood's Therapeutics*; Hare's Practical Therapeutics; A. A. Stevens' Modern Materia Medica and Therapeutics; Culbreth's Materia Medica and Pharmacy; National Dispensatory Reference Text-books, Osborne, Wilcox, Sollmann, Shoemaker, U. S. Pharmacopœia and National Formulary.

Prosthetic Dentistry.—*The American Text-book of Prosthetic Dentistry*; Esseg's Dental Metallurgy.

Operative Dentistry.—*Harris' Principles of Practice*; Tome's Dental Anatomy and Surgery; Taft's Operative Dentistry; American System of Dentistry—Litch; Kirk's Operative Dentistry; Johnson's Operative Dentistry.

Oral Surgery.—Marshall's Oral Surgery; Grant's Oral Surgery.

Histology.—Nichols, Böhm and Davidoff; Anatomy and Histology of the Mouth, by Bromell.

Orthodontia.—Angle, Treatment of Malocclusion of the Teeth and Fractures of the Maxillæ; Talbot, Irregularities of the Teeth; Jackson, Orthodontia.

Dental Jurisprudence.—Reh fuss.

Dental Pathology and Therapeutics.—Burchard.

Comparative Dental Anatomy.—Thompson.

GRADUATION.

Candidates for graduation must have attended three full courses of lectures, each of eight months' duration, and three courses of clinical instruction in this Department, during the regular winter term and in separate years. Students are examined at the end of the regular course upon all subjects taught them during that course. Should the student fail in his examination in course, he may be re-examined in the fall. All fees must be paid and Infirmary requirements complied with before the student may present himself for examination.

Students must enter before, or within ten days after, the opening lecture of the regular course. They may register at any time during the nine months Infirmary course, and thus begin Infirmary practice at once upon payment of twenty-five dollars, which amount will be deducted from their tuition fees for the succeeding regular term.

The candidate for graduation must be examined upon all subjects taught in this Department, and before the examination he must perform operations upon the natural organs in the Infirmary, and present the Museum a well-constructed specimen of dental mechanism made by himself in the dental laboratory of the University.

In addition to the above requirements, the moral character and habits of the candidate, his industry, and diligent attendance will be taken into consideration. Notable negligence, immorality, or habitual absence from the lectures will preclude the candidate from attaining his degree, even though he may have acquired sufficient technical knowledge to pass a creditable examination. This reservation on the part of the Faculty of the right to make good moral character a prerequisite for graduation must not be overlooked.

The student also, during and between the sessions, must comply with the State laws regulating the practice of Dentistry, and act in accordance with the recognized code of ethics of the dental profession.

The degrees are conferred by The George Washington University, incorporated by Act of Congress of the United States.

PRIZES.

UNIVERSITY PRIZE.—A prize is given by the University to the graduate passing the best examination in all branches and having the best Infirmary record.

PRIZE AWARDS 1908-09.

The **FIRST PRIZE** for the best record throughout the course of three years is awarded to Ewing Marvin Wood Bear, whose average is 87.6 per cent.

Honorable mention is made of William Harry Barnhard, Jr., whose average is 79 per cent; Max Samuel Goldberg, whose average is 75.2 per cent.

The **J. HALL LEWIS PRIZE** for the best Prosthetician is awarded to Albert Sidney Davidson.

Honorable mention is made of Ewing Marvin Wood Bear.

The **HENRY C. THOMPSON PRIZE** for the best Operator in the Dental Infirmary, is awarded to Ewing Marvin Wood Bear.

COURSES IN ARTS AND SCIENCES.

Students taking a full course for a degree may be admitted without additional fee, except laboratory fees, to courses for which they are qualified, in the Department of Arts and Sciences, the aggregate of such courses not to exceed six hours per week.

LOCATION.

The Dental Building is No. 1325 H street, N. W. It is within half a square of all lines of street cars going to every part of the city.

The Dean may be seen personally at 702 10th street, N. W., on any week day and also at the Dental Building, 1325 H street, N. W., on Tuesday and Thursday of each week at 4.30 p. m. during the session.

FEES AND CONTINGENT EXPENSES.

1. Matriculation fee (payable once).....	\$5
2. Annual library fee	2
3. Tuition fee per annum, including all charges for materials....	125

- | | |
|---|-----|
| 4. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, excepting for courses which do not begin with the terms | \$2 |
| 5. Fee for graduation | 10 |
| 6. Tuition fee per annum for any year repeated once..... | 75 |
| In addition to the tuition fees for special or repeated laboratory courses, a charge will be made for materials used. | |
| 7. Fee for a certificate under the seal of the University..... | 2 |
| 8. Auditors are admitted to lecture courses for the regular tuition fees, but are not permitted to take active part in the work of the classes and will not be allowed credit, in a subsequent course of studies leading to a degree, for attendance as auditors. No matriculation or library fee is charged. | |

No change will be made in the fees fixed at registration except in case of withdrawal, and then only upon notice in due form and from the end of the current quarter session when such withdrawals shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form, to be obtained from the Dean, and will only be received at the end of a quarter session.

Students are furnished microscopes at the following rates:

Microscope for histological laboratory use.....	\$3
Microscope for bacteriological, pathological, and clinical microscopy laboratory use	5

PAYMENT OF FEES.

All fees are to be paid to the Treasurer. Tuition fees are payable quarterly, in advance. Matriculation, library, and laboratory fees are payable in full, in advance.

BOARD AND ROOMS.

A register of approved boarding houses is kept by the Treasurer. Accommodations cost from \$25 to \$40 a month.

For catalogues, application blanks and further information, address

THE SECRETARY,
The George Washington University,
Washington, D. C.

NATIONAL COLLEGE OF PHARMACY.

FACULTY.

CHARLES WILLIS NEEDHAM, LL.D.....	PRESIDENT OF THE UNIVERSITY
HENRY E. KALUSOWSKI, M.D., Phar.D...	Professor of Pharmacy, Dean
SAMUEL WAGGAMAN, M.D., Phar.D.....	Professor of Materia Medica, Botany and Toxicology
WILLIAM F. HILLEBRAND, Ph.D., Phar.D.....	Professor of Chemistry and Physics
FREDERICK A. HOLTON, B.S., Phar.D.,	Professor of Analytical Chemistry
BURTON J. HOWARD, B.S.....	Professor of Microscopy
HENRY B. FLOYD, Phar.D.....	Professor of Mercantile Pharmacy
ALEXANDER MUNCASTER, Phar.D., LL.B., LL.M.....	Professor of Pharmaceutical Jurisprudence
HOWARD M. BRADBURY, Phar.D.....	Assistant to the Professor of Chemistry
J. WILTON GRADY, Phar.D., }	. Assistants to the Professor of Pharmacy
LOUIS B. CASTELL, Phar.D., }	

GENERAL STATEMENT.

The National College of Pharmacy, which is the outgrowth of the Columbian Pharmaceutical Association, organized in April, 1871, was chartered under the provisions of an act of Congress in 1872, and opened its doors to students November 11, of that year. In February, 1906, it became a member of the educational system of The George Washington University, under the charter of the University granted by Congress March 3, 1905, providing for the organization of colleges. The President of the University is *ex-officio* president of the National College of Pharmacy, and the College is represented in the President's Council by its Dean.

The work of the college embraces courses in chemistry, botany, materia medica and toxicology, pharmacy and pharmaceutical laboratory work, analytical chemistry, microscopy, mercantile pharmacy, and pharmaceutical jurisprudence. Three years are required for the completion of the prescribed course.

The new College building is centrally located on I street, northwest, between Eighth and Ninth streets. It is easily reached by either of the four principal street car lines of the city.

SPECIAL COURSES.

Students may select one or more of the branches taught and attend the lectures and laboratory work during the time set apart for such study.

Students taking single tickets are not entitled to take the examinations for the degree conferred by the College.

THE DEGREE

The degree conferred is *Doctor of Pharmacy*.

QUALIFICATIONS FOR THE DEGREE.

1. The student shall have attended three courses of instruction in Chemistry, Pharmacy, Analytical Chemistry, Materia Medica, Botany, and Toxicology, and two in Microscopy, the last of which must have been in this College; and one course each in Mercantile Pharmacy and Pharmaceutical Jurisprudence.

2. He must have passed a satisfactory examination in each of the branches taught.

3. He must be recommended by the Board of Examiners.

MATERIA MEDICA, BOTANY AND TOXICOLOGY.

FRESHMAN COURSE.

The first lectures are an introductory to the study of elementary botany, after which follow vegetable histology and plant physiology. The subject-matter of these lectures is thoroughly explained by means of charts, diagrams, and specimens.

JUNIOR COURSE.

This course is devoted to the consideration of the various theories concerning the vegetable world and the practical results obtained by experienced laborers in this science. The lectures are illustrated by means of the lantern and microscope. A large part of the course is devoted to a consideration of the official organic drugs.

SENIOR COURSE.

The lectures are mainly upon the active principles, adulterants, official preparations, therapeutic uses, and doses; after which the organic and inorganic poisons are taken up under three heads: 1st, Corrosive; 2d, Irritant; and 3d, Neurotic Poisons. Under these three divisions are explained briefly their action, detection, and antidote.

PHARMACY.

FRESHMAN COURSE.

This course is given to the study of the various pharmaceutical processes and operations. Following in the order named are lectures on

metrology, heat, thermometry, evaporation, distillation, fusion, sublimation, calcination granulation, comminution, solution, filtration, clarification, decoloration, precipitation, crystallization, and extraction, during which the various methods used to bring about the desired results will be illustrated.

JUNIOR COURSE.

During a part of this course the time is given to the application of the processes considered during the Freshman year to pharmacopœial preparations, and such modifications as adapt them to special uses. This includes methods for making solutions of various substances, extracts, pills, tablets, triturates, compressed tablets, capsules, powders, suppositories, plasters, ointments, cerates, and oleates.

The latter part of this course is taken up with the study of official preparations obtained from the elementary bodies beginning with bromine, chlorine, iodine, phosphorus, and sulphur, followed by carbon, boron, silicon, the inorganic acids, potassium, sodium, lithium, ammonium, magnesium, calcium, barium, zinc, aluminum, cerium, cadmium, manganese, iron, chromium, lead, silver, copper, mercury, antimony, arsenic, bismuth, and gold.

SENIOR COURSE.

The time during this course is mainly given to the study of compounds chiefly derived from organic matter, and products obtained therefrom, amylaceous and saccharine substances; glucosides and alkaloids, volatile oils and animal products commonly used in pharmacy, vegetable oils, soaps, resinoids and products from resins.

ANALYTICAL CHEMISTRY.

The instruction in this department is intended to present the chemical tests of the United States Pharmacopœia, with methods for the identification of substances and for the detection of impurities; to instruct him in the methods of assaying and the use of volumetric solutions, and to enable students to analyze any ordinary mixture of inorganic material.

For the purpose of carrying out the work of this department a large, well-equipped laboratory is provided with all the usual water and gas facilities, and has recently been wired and installed with electric apparatus whereby electro-chemical methods of analysis can be taught and the application of the electric current to the preparation of chemicals by the methods of electro-chemistry can be illustrated before the students. These and other facilities afford students exceptional opportu-

nities to become familiar with the fundamental principles of the science of chemistry.

The first year is devoted to experimental work so arranged as to supplement the lectures in General Chemistry.

The second year covers a systematic course in qualitative analysis in connection with the tests of the United States Pharmacopœia.

The third year is devoted to volumetric analysis by means of the standard solutions of the Pharmacopœia.

GENERAL CHEMISTRY AND PHYSICS.

Inasmuch as the subjects of Analytical Chemistry and Pharmacy are fully provided for in other courses, these lectures are devoted more closely to the fundamental principles and classification which must underlie a thorough and systematic knowledge of Chemistry. Owing to the intimate connection existing between Chemistry and several branches of Physics, a number of lectures illustrating the more important laws and principles of some of these branches precedes the regular course in Chemistry, and others on these subjects with which a prior acquaintance is less important follow after the student has acquired some knowledge of chemical changes. During the first half of the second year Physics and the non-metallic elements receive consideration, followed during the remainder of the second and a portion of the third year by the metals. The greater portion of the third year is devoted to the exposition of the more important facts, principles, and theories of Organic Chemistry.

MICROSCOPY.

The course of Microscopy gives instruction in the use of the compound microscope as an aid in the study and identification of drugs, and requires full attendance from Junior and Senior students.

The work includes both lectures and laboratory courses, and consists in the examination of plant tissue as illustrated in various vegetable substances most familiar to pharmacists. Special attention is given to the structural characteristics by which one drug can be distinguished from another as well as to the detection and identification of the most common adulterants used.

MERCANTILE PHARMACY AND PHARMACEUTICAL JURISPRUDENCE.

These courses are required in the Senior class only.

FEES.

Matriculation	\$5
Tickets for the full year's course of instruction, Freshman or Junior.	70
Tickets for the full year's course of instruction, Senior.....	80
Single tickets for Chemistry, Materia Medica, Botany and Toxicology, each	15
Single tickets for Analytical Chemistry.....	20
Single tickets for Practical Pharmacy.....	20
Single tickets for Microscopy.....	10
Single tickets for Mercantile Pharmacy.....	5
Single tickets for Pharmaceutical Jurisprudence.....	5
Fee for Diploma.....	10

SCHEDULE.

The thirty-eighth annual session of the College will begin on Wednesday, September 22, 1909, and close on Wednesday, June 1, 1910.

Monday.	Tuesday.	Wednesday.
FRESHMEN.	SENIORS.	FRESHMEN.
Botany.	Microscopy.	Physics and General Chemistry.
Lectures and Recitations, 10 to 11 a. m.	Lectures, Laboratory Work and Recitations, 6 to 8 p. m.	Lectures and Recitations, 6 to 7 p. m.
Pharmacy.	Mercantile Pharmacy.	Analytical Chemistry
Lectures and Recitations, 11 a. m. to 12 m.	8 to 10 p. m.	Lectures, Recitations and Laboratory Work,
Recess, 12 m. to 12.30 p. m.	Pharmaceutical Jurisprudence.	7 to 11 p. m.
Pharmacy.	Jan. 12 to close of Term.	
Laboratory Work, 12.30 to 4 p. m.	8 to 9 p. m.	
JUNIORS.		
Physics and General Chemistry.		
Lectures and Recitations, 6 to 7 p. m.		
Analytical Chemistry		
Lectures, Recitations and Laboratory Work, 7 to 11 p. m.		

SCHEDULE.

Thursday.	Friday.	Saturday.
<p>SENIORS.</p> <p>Materia Medica and Toxicology.</p> <p>Lectures and Recitations, 10 to 11 a. m.</p> <p>Pharmacy.</p> <p>Lectures and Recitations, 11 a. m. to 12 m.</p> <p>Recess, 12 m. to 12.30 p. m.</p> <p>Pharmacy.</p> <p>Laboratory Work, 12.30 p. m. to 4 p. m.</p> <p>JUNIORS.</p> <p>Microscopy.</p> <p>Lectures, Laboratory Work and Recitations, 6 to 8 p. m.</p>	<p>SENIORS.</p> <p>General and Organic Chemistry.</p> <p>Lectures and Recitations, 6 to 7 p. m.</p> <p>Quantitative Chemical Analysis.</p> <p>Lectures and Recitations, 7 to 11 p. m.</p>	<p>JUNIORS.</p> <p>Botany and Materia Medica.</p> <p>Lectures and Recitations, 10 to 11 a. m.</p> <p>Pharmacy.</p> <p>Lectures and Recitations, 11 a. m. to 12 m.</p> <p>Recess, 12 m. to 12.30 p. m.</p> <p>Pharmacy.</p> <p>Laboratory Work, 12.30 p. m. to 4 p. m.</p>

Entrance examination at 1 p. m. on Thursday, September 16, 1909, in the lecture-room of the College. Annual examination of Freshmen and Juniors for promotion and of Seniors for graduation begins on Wednesday, April 29, 1910.

For further information consult the Dean, Henry E. Kalusowski, 808 I St., N. W.

COLLEGE OF VETERINARY MEDICINE.

BOARD OF TRUSTEES.

J. A. T. HALL.	DAVID E. BUCKINGHAM, V.M.D.
H. ROZIER DULANEY.	JOHN LOCKWOOD, V.S.
WILLIAM CORCORAN EUSTIS.	JOHN P. TURNER, V.M.D.

FACULTY.

CHARLES WILLIS NEEDHAM, LL.D.....	PRESIDENT OF THE UNIVERSITY
DAVID E. BUCKINGHAM, V.M.D.....	Professor of Materia Medica, Therapeutics, and Canine Practice; Dean
CHARLES E. MUNROE, Ph.D.....	Professor of Chemistry
SHEPHERD IVORY FRANZ, Ph.D.....	Professor of Physiology
JOHN LOCKWOOD, D.V.S.....	Professor of Veterinary Surgery
JOHN P. TURNER, V.M.D.....	Professor of Theory and Practice of Veterinary Medicine
ROBERT J. FORMAD, V.M.D., M.D.....	Professor of Comparative Histology and Pathology
J. J. KINYOUN, Ph.D., M.D.....	Professor of Bacteriology and Pathology
ADOLPH EICHORN, D.V.S.....	Professor of Meat Hygiene
ALBERT H. HASSAL, M.R.C.V.S.....	Professor of Veterinary Zoölogy
GEORGE H. HART, V.M.D., M.D.....	Professor of Sanitary Science and National Quarantine
BENJAMIN T. WOODWARD, V.M.D.....	Professor of Milk Hygiene and Dairy Inspection
ADRIAN V. HALL, V.M.D.....	Professor of Veterinary Anatomy
.....	.....Professor of Animal Husbandry and Breeding
R. J. STAFFORD, D.V.M.....	Assistant Professor of Anatomy
HULBERT YOUNG, V.M.D.....	Lecturer on Horse Shoeing and Demonstrator of Anatomy
WILLIAM P. COLLINS, D.V.S.....	Instructor in Clinical Veterinary Surgery

ANNOUNCEMENT.

The organization of a College of Veterinary Medicine under the charter of The George Washington University was authorized by the Board of Trustees, on March 17, 1908. The great demand for the services of trained veterinarians by the Federal and State governments and the increasing importance of veterinary science in municipal hygiene show the need of the development of this branch of medical science in Washington in a regularly organized college under University auspices.

The headquarters, libraries, laboratories and experimental farms of the Bureau of Animal Industry of the Department of Agriculture are located in the District of Columbia, so that students of the College of Veterinary Medicine may keep closely in touch with the most recent investigations in veterinary science. The Administration Building and two hospital buildings of the College are located at 2113-2115 Fourteenth street, N. W. In this building are the Dean's office, library, pharmacy, and faculty, reception, and operating rooms. The veterinary hospital and the canine hospital are equipped with all appliances for the cure and relief of sick and injured animals.

In addition to demonstrations in the hospitals, students receive clinical instruction in the private hospitals of Professors John P. Turner and John Lockwood. Clinics are held at abattoirs and stockyards under governmental inspection and visits to stock and dairy farms in company with clinical professors are required.

The hours of instruction are so arranged that clerks in Government employ can take the course.

A separate statement regarding the courses of study and the matriculation of students will be mailed upon application to all persons addressing the Secretary of the University or the Dean of the College of Veterinary Medicine, 2113 Fourteenth street, N. W., Washington, D. C.

PART III.

STUDENTS IN THE UNIVERSITY.

DEGREES CONFERRED, MISCELLANEA.

Students in the University.

DEPARTMENT OF ARTS AND SCIENCES. GRADUATE STUDIES.

In Attendance.

Name.	Legal residence.	City address.
Clark, Burton William.....	N. Y.	927 Rhode Island Ave. B.S., 1907, M.S., 1908, Syracuse University. <i>Topic</i> —Geology.
Cole, Frank	Okla.	College Park, Md. B.S., 1908, Oklahoma Agricultural and Mechanical College. <i>Topic</i> —Chemistry.
Deal, Alice	Md.	The Susquehanna. A.B., 1899, Woman's College, Baltimore, Md. <i>Topic</i> —Physics.
Fox, Paul Jefferson.....	Ill.	Bureau of Chemistry. B.Sc., 1900, University of Chicago. <i>Topics</i> —Chemistry, Geology, Bacteriology.
Garton, Alfred Clarke.....	Mich.	2140 N Street. M.D., 1907, The George Washington University. <i>Topics</i> —Bacteriology, Bio-chemistry, French.
Gates, Edward Percy.....	Ark.	3506 Center Street. B.A., 1908, The George Washington University. <i>Topics</i> —Economics.
Huntington, Carl Douglas.....	N. Y.	Patent Office. A.B., 1908, Hamilton College. <i>Topics</i> —Chemistry, Physics.
Jacobsen, Karl Theodore.....	Wis.	218 A Street, S. E. B.A., 1902, Luther College. M.A., 1906, University of Wisconsin. <i>Topics</i> —Greek, Latin.
Nolan, Thomas Brew, Jr.....	D. C.	The Hawarden. B.S., 1907, Pennsylvania State College. <i>Topics</i> —Civil Engineering, Hydraulic Engineering.
Palmore, Julian Ivanhoe.....	Va.	Bureau of Chemistry. B.S., 1902, M.S., 1904, Virginia Polytechnic Institute. <i>Topic</i> —Chemistry.
Pollock, William McCally.....	W. Va.	332 Indiana Ave. A.B., 1898, University of West Virginia. <i>Topic</i> —Chemistry.

Name.	Legal residence.	City address.
Turkenton, William James.....	D. C.	1513 33d Street.
B.S., in C.E., 1908, The George Washington University.		
<i>Topic</i> —Advanced Masonry.		
Valaer, Peter, Jr.....	N. C.	421 P Street.
B.S., in Chem., 1906, North Carolina Agricultural and Mechanical College.		
<i>Topic</i> —Chemistry.		
Whitehead, John Roy.....	Ohio	War Department.
E.E., 1907, Purdue University.		
<i>Topic</i> —Mathematics.		

Doctor of Civil Law.

Miller, Clarence Alphonso.....	Mo.	Matamoras, Mexico.
LL.B., 1899, Kansas City School of Law.		
LL.M., 1905, M. Dip., 1906, The George Washington University.		
Shibley, George Henry.....	D. C.	The Ontario.

Civil Engineer.

Adams, Raymond Edmond.....	Pa.	707 22d Street.
A.B., 1891, Central High School, Philadelphia, Pa.		
Senior, Thomas Richard.....	D. C.	203 Elm Street.
B.S., in C.E., 1908, The George Washington University.		
Starr, Frank Charles.....	Nova Scotia.	1530 I Street.
S.B., 1905, Massachusetts Institute of Technology.		

Electrical Engineer.

Gordon, Hayner Haskell.....	Ohio	1310 Girard Street.
B.S., in C.E., 1908, The George Washington University.		
Honn, Harlan Verne.....	D. C.	400 8th Street, N. E.
B.S. in E.E., 1909, The George Washington University.		
Mortimer, Charles Ward.....	Miss.	1530 I Street.
B.S., 1902, Mississippi College.		
M.E., 1907, Cornell University.		
Steele, Frank Bailey.....	W. Va. ...	2024 G Street.
Graduate from Virginia Military Institute.		

Master of Science.

Allen, Edward Riley.....	Ill.	1225 11th Street.
B.L.A., 1906, University of Illinois.		
<i>Topics</i> —Major, Chemistry; Minors, German, Geology.		

- | Name. | Legal residence. | City address. |
|--|------------------|-------------------------------------|
| Birtwell, Bertha | D. C. | The Congressional. |
| A.B., 1908, The George Washington University. | | |
| <i>Topics</i> —Major, Mathematical Physics; Minors, Mathematics, Astronomy. | | |
| Boughton, Everett William..... | N. Y. | 917 16th Street. |
| B.S. in Chemistry, 1903, Polytechnic Institute of Brooklyn. | | |
| <i>Topics</i> —Major, Chemistry; Minors, Bacteriology, Pathology, Physiology. | | |
| Kibler, Alton Lewin..... | Va. | 1323 R Street. |
| A.B., 1904, Randolph-Macon College. | | |
| <i>Topics</i> —Major, Chemistry; Minors, Agricultural Chemistry, Bacteriology. | | |
| McElfresh, Ralph Finley..... | D. C. | 309 M Street. |
| C.E., 1908, Lehigh University. | | |
| <i>Topics</i> —Major, Economics; Minors, Mathematics, Hydraulic Engineering. | | |
| Sanders, Frances | D. C. | 1360 Kenyon Street. |
| B.S., 1901, Columbian University. | | |
| <i>Topics</i> —Major, Mathematics; Minors, Applied Mechanics, Psychology. | | |
| Shively, Robert Rex..... | Okla. | 1221 O Street. |
| B.S., 1902, Oklahoma Agricultural and Mechanical College. | | |
| <i>Topics</i> —Major, Chemistry; Minors, German, Microscopic Foods and Drugs. | | |
| Sterrett, John Adlum..... | D. C. | Springland, Pierce Mill Road, D. C. |
| B.S., 1908, The George Washington University. | | |
| <i>Topics</i> —Major, Electrical Engineering; Minors, Mechanical Engineering, Mathematics. | | |
| Swett, Otis Dow..... | Md. | Chevy Chase, Md. |
| LL.B., 1891, LL.M., 1892, Columbian University. | | |
| B.S., 1904, The George Washington University. | | |
| <i>Topics</i> —Major, Chemistry; Minor, Chemistry. | | |

Master of Arts.

- | | | |
|--|------------|----------------------|
| Allis, Frank Coy..... | N. Y. | 1751 Willard Street. |
| LL.B., 1903, Cornell University. | | |
| LL.M., 1906, A.B., 1908, The George Washington University. | | |
| <i>Topics</i> —Major, Economics; Minors, Political Science, Law. | | |
| Baker, Anthusa Jeanette..... | D. C. | 62 Rhode Island Ave. |
| A.B., 1907, Wittenberg College. | | |
| <i>Topics</i> —Major, Education; Minors, Greek, Latin. | | |

Name.	Legal residence.	City address.
Baldwin, Edward Damon.....	Ore.	1736 G Street.
B.L., 1906, Whitman College.		
<i>Topics</i> —Major, Sociology; Minors, Public Law, Political Science.		
Barbour, Alice Maud.....	Conn.	1738 N Street.
B.S., 1893, Wellesley College.		
<i>Topics</i> —Major, English; Minors, English, Sociology.		
Barney, Ellen Sybil.....	Wis.	The Hamilton.
B.A., 1903, University of Wisconsin.		
<i>Topics</i> —Major, History; Minors, German, English.		
Churchill, George Morton.....	Mass.	118 5th Street, S. E.
A.B., 1896, Boston University.		
<i>Topics</i> —Major, History; Minors, History, Political Science.		
Drummond, Mary Walter.....	D. C.	1262 Columbia Road.
A.B., 1905, Woman's College of Baltimore.		
<i>Topics</i> —Major, Education; Minors, Psychology, Latin.		
Ely, Selden Marvin.....	D. C.	50 S Street.
LL.B., 1894, LL.M., 1895, B.A., 1908, The George Washington University.		
<i>Topics</i> —Major, Education; Minors, Psychology, Sociology.		
Gudmunsen, Marian A. (Mrs.)...	Idaho	1219 I Street.
A.B., 1903, University of Utah.		
<i>Topics</i> —Major, Sociology; Minors, English, History.		
Hare, Butler Black.....	S. C.	1404 L Street.
A.B., 1899, Newberry College.		
<i>Topics</i> —Major, History; Minors, Economics, Polit- ical Science.		
Hopson, Howard Colwell.....	Wis.	Interstate Commerce Commission.
B.A., 1908, The George Washington University.		
<i>Topics</i> —Major, Political Science; Minors, Political Economy, History.		
Kramer, Stephen Elliott.....	D. C.	1318 S Street.
B.S., 1906, The George Washington University.		
<i>Topics</i> —Major, Education; Minors, Psychology, Education.		
Lampson, Lawrence Vincent....	Ohio	1011 B Street, N. E.
A.B., 1906, Oberlin College.		
<i>Topics</i> —Major, English; Minors, History, Education.		
Lowe, Henry Francis.....	D. C.	215 5th Street, N. E.
L.I., 1890, College of William and Mary.		
B.S., 1903, The George Washington University.		
<i>Topics</i> —Major, Education; Minors, Education, Sociology.		

Name.	Legal residence.	City address.
McAvoy, Catharine Agatha.....	D. C.	1917 17th Street.
A.B., 1908, The George Washington University.		
<i>Topics</i> —Major, Latin; Minors, French, German.		
Miller, Alvin Wilson.....	Ill.	2914 N Street.
B.S., 1908, The George Washington University.		
<i>Topics</i> —Major, Mathematics; Minors, Electrical Engineering, Physics.		
Nin-Frias, Albert	Uruguay ..	1410 21st Street.
B.A.S., 1907, Montevideo University.		
<i>Topics</i> —Major, Sociology; Minors, Philosophy, English.		
Owens, Oscar Lee.....	Md.	Cambridge, Md.
B.D., 1905, Rochester Theological Seminary.		
<i>Topics</i> —Major, English; Minors, Philosophy, Sociology.		
Paddock, Ernest Moorhead.....	Pa.	934 North Ave., Allegheny, Pa.
B.A., 1894, University of Pennsylvania.		
Graduate, 1897, Episcopal Theological School, Cambridge, Mass.		
<i>Topic</i> —Philosophy.		
Schoenfeld, Hans Fr. Arthur....	D. C.	3448 34th Place, Cleveland Park.
B.A., 1907, The George Washington University.		
<i>Topics</i> —Major, History; Minors, History, English.		
Simmons, William Wyatt.....	Miss.	708 10th Street.
B.A., 1905, Mississippi College.		
<i>Topics</i> —Major, Sociology; Minors, Economics, History.		
Stevens, William Spring.....	Me.	1012 14th Street.
A.B., 1906, Colby College.		
<i>Topics</i> —Major, Political Science; Minors, International Law, Economics.		
Sullivan, Francis Paul.....	D. C.	1823 U Street.
A.B., 1904, Georgetown University.		
<i>Topics</i> —Major, Architecture; Minors, Philosophy, Classical Archaeology, Architecture.		
Thomas, William John Denziloe..	D. C.	1530 29th Street.
<i>Topics</i> —Major, History; Minors, Philosophy, Sociology.		
Van Vleck, William Cabell.....	D. C.	800 E Street, N. E.
B.A., 1908, The George Washington University.		
<i>Topics</i> —Major, History; Minors, Economics, Education.		
Walsh, Daniel Michael.....	Vt.	U. S. Bureau of Chemistry, St. Paul, Minn.
B.S., 1904, University of Vermont.		
<i>Topics</i> —Major, Economics; Minors, History, Political Theories.		

Name.	Legal residence.	City address.
Watkins, Rhoda	Penna.	1412 14th Street.
A.B., 1906, The George Washington University.		
<i>Topics</i> —Major, English; Minors, English, German.		
White, Emilie Margaret.....	D. C.	1568 University Place.
A.B., 1907, The George Washington University.		
<i>Topics</i> —Major, German; Minor, History.		
Wrightson, James Owens.....	D. C.	812 20th Street.
A.B., 1909, The George Washington University.		
<i>Topics</i> —Major, Sociology; Minors, Semitics, History.		
Young, Julia Elektra Ludlow		
(Mrs.)	N. Y.	Nat'l Cathedral School.
B.A., 1906, Barnard College, Columbia University.		
<i>Topics</i> —Major, Latin; Minors, Greek, Archæology.		

Doctor of Jurisprudence.

Willard, Charles Franklin.....	Mass.	1340 Girard Street.
B.S. in M.E., 1901, B.S. in Naval Architecture,		
1902, Massachusetts Institute of Technology.		
J.B., 1906, J.M., 1907, Boston University Law		
School.		
<i>Topics</i> —Major, Corporations; Minors, Constitu-		
tional Law, Corporation Finance.		

Doctor of Philosophy.

Alden, Levi Russell.....	D. C.	809 L Street.
B.A., 1903, M.A., 1904, Columbian University.		
<i>Topics</i> —Major, History; Minors, Law, History.		
Backus, Cyrus Day.....	N. Y.	U. S. Patent Office.
Ph.B., 1896, LL.B., 1896, Cornell University.		
B.S., 1904, Columbian University.		
M.S., 1905, The George Washington University.		
<i>Topics</i> —Major, Electrical Engineering; Minors,		
Physics, Chemistry.		
Bates, Carleton	Mass.	205 D Street.
B.S., 1908, Boston University.		
<i>Topics</i> —Major, Bacteriology; Minors, Biochemistry,		
German.		
Betts, Philander	N. J.	The Oakland.
B.S., 1891, M.S., 1895, Rutgers College.		
E.E., 1903, Columbian University.		
<i>Topics</i> —Major, Electrical Engineering; Minors,		
Chemistry, Mathematics.		
Bolger, William Augustine.....	Mich.	Holy Cross College,
		Brookland, D. C.
Ph.B., 1907, University of Notre Dame.		
<i>Topics</i> —Major, Economics; Minors, Sociology, Polit-		
ical Science.		

- | Name. | Legal residence. | City address. |
|---|------------------|------------------------|
| Church, Calvin Grant..... | Md. | 111 12th Street, S. E. |
| B.S., 1900, Maryland Agricultural College. | | |
| M.S., 1902, Columbian University. | | |
| <i>Topics</i> —Major, Chemistry; Minor, Chemistry. | | |
| Clark, Marion | Md. | 1329 N Street. |
| B.A., 1901, M.A., 1903, Western Maryland College. | | |
| <i>Topics</i> —Major, History; Minors, Law, Political Science. | | |
| Coffey, George Nelson..... | N. C. | Bureau of Soils. |
| Ph.B., 1900, University of North Carolina. | | |
| M.S., 1908, The George Washington University. | | |
| <i>Topics</i> —Major, Geology; Minors, Mineralogy, Meteorology. | | |
| Custis, Horace Hatch..... | D. C. | 912 15th Street. |
| A.B., 1906, Johns Hopkins University. | | |
| M.A., 1908, The George Washington University. | | |
| <i>Topics</i> —Major, Chemistry; Minors, Geology, Bacteriology. | | |
| Deis, John Homer..... | D. C. | 119 B Street, S. E. |
| LL.B., 1902, Columbian University. | | |
| M.A., 1908, The George Washington University. | | |
| <i>Topics</i> —Major, History; Minors, History, Sociology. | | |
| Doyle, Aida Mary..... | Pa. | 1123 Dartmouth Street. |
| B.S., 1898, M.S., 1899, Columbian University. | | |
| <i>Topics</i> —Major, Agricultural Chemistry; Minors, Chemistry, Microscopic Foods and Drugs. | | |
| Edler, August Friedrich W..... | Germany .. | 3513 Center Street. |
| B.A., 1906, M.A., 1907, M. Dip., 1908, The George Washington University. | | |
| <i>Topics</i> —Major, Germanics; Minors, Political Theory, History. | | |
| Frost, Wesley | Ky. | 1117 17th Street. |
| A.B., 1907, Oberlin College. | | |
| <i>Topics</i> —Major, Economics; Minors, Law, History. | | |
| Gardner, James Henry..... | Ky. | Geological Survey. |
| B.S., 1900, M.S., 1906, Kentucky State College. | | |
| <i>Topics</i> —Major, Geology; Minors, Geology, Zoölogy. | | |
| Gilbert, Walter Merwin..... | N. Y. | Bond Building. |
| B.S., 1899, College of City of New York. | | |
| <i>Topics</i> —Major, Philosophy; Minors, Philosophy, English. | | |
| Hall, Percival | D. C. | Kendall Green. |
| A.B., 1892, Harvard University. | | |
| M.A., 1893, Gallaudet College. | | |
| M.A., 1898, Columbian University. | | |
| <i>Topics</i> —Major, Mathematics; Minors, Applied Mathematics, Astronomy. | | |

- | Name. | Legal residence. | City address. |
|---|------------------|-------------------------------------|
| Heth, Eva Virginia..... | D. C. | 1759 Church Street. |
| A.B., 1892, A.M., 1893, Columbian University. | | |
| <i>Topics</i> —Major, Latin; Minors, German, Classical
Archæology. | | |
| Hillyer, William Eldridge..... | D. C. | 1365 Park Road. |
| B.S., 1899, M.S., 1900, Columbian University. | | |
| <i>Topics</i> —Major, Chemistry; Minors, Chemistry,
Electrical Engineering. | | |
| Hinman, Ida | Iowa | 727 Morgan Street,
Keokuk, Iowa. |
| B.S., 1892, A.M., 1902, Columbian University. | | |
| <i>Topics</i> —Major, English; Minors, German, French. | | |
| Houghton, Harry Wilson..... | Md. | Bureau of Chemistry. |
| B.S. in Chemistry, 1906, M.S., 1907, The George
Washington University. | | |
| <i>Topics</i> —Major, Chemistry; Minors, Anatomy, His-
tology. | | |
| Huddle, John Thomas..... | Va. | 738 11th Street. |
| A.B., 1891, A.M., 1896, Roanoke College. | | |
| Diploma in Divinity, 1896, Gettysburg Theological
Seminary. | | |
| <i>Topics</i> —Major, Psychology; Minors, Sociology,
English. | | |
| Kibler, Alton Lewis..... | Va. | 1323 R Street. |
| A.B., 1904, Randolph-Macon College. | | |
| <i>Topics</i> —Major, Chemistry; Minors, Agricultural
Chemistry, Bacteriology. | | |
| Kibler, Thomas Latimer..... | Va. | 1323 R Street. |
| A.B., 1904, Randolph-Macon College. | | |
| M.A., 1908, The George Washington University. | | |
| <i>Topics</i> —Major, Economics; Minors, European Diplo-
macy, Sociology. | | |
| Kimball, Herbert Harvey..... | N. H. | Library, U. S. Weather
Bureau. |
| B.S., 1884, New Hampshire College of Agriculture
and Mechanic Arts. | | |
| M.S., 1900, Columbian University. | | |
| <i>Topics</i> —Major, Astro-Physics; Minor, Meteorology. | | |
| Lyon, Marcus Ward, Jr..... | N. J. | National Museum. |
| Ph.B., 1897, Brown University. | | |
| M.S., 1900, M.D., 1902, Columbian University. | | |
| <i>Topics</i> —Major, Zoölogy; Minors, Neurology, His-
tology. | | |
| McBryde, Charles Neil..... | Va. | 1736 G Street. |
| B.S., 1891, University of South Carolina. | | |
| M.S., 1893, The Virginia Polytechnic Institute. | | |
| M.D., 1897, The Johns Hopkins University. | | |
| <i>Topics</i> —Major, Preventive Medicine; Minors, Bot-
any, Geology. | | |

- | Name. | Legal residence. | City address. |
|---|------------------|---|
| MacDonald, Donald Francis. | Wash. | Geological Survey. |
| B.S., 1905, University of Washington State. | | |
| M.S., 1906, The George Washington University. | | |
| <i>Topics</i> —Major, Geology; Minors, Paleontology, English. | | |
| Mattern, John | Germany .. | 431 6th Street. |
| 1904, <i>abitur</i> , Cleve Gymnasium. | | |
| 1904-6, Universities of Münster and Bonn. | | |
| <i>Topics</i> —Major, German; Minors, Latin, Greek. | | |
| Mattern, Louis Wilson..... | Pa. | McKinley School. |
| B.S., 1894, Pennsylvania State College. | | |
| <i>Topics</i> —Major, Chemistry; Minor, Chemistry. | | |
| Mills, Joseph Strayer..... | Md. | High School of Commerce, New York City. |
| B.A., 1890, M.A., 1893, Western Maryland College. | | |
| <i>Topics</i> —Major, Chemistry; Minors, Mineralogy, Physics. | | |
| Newberne, Robert Edward Lee... | Texas | Bureau of Health, Interior Dept., Philippine Islands. |
| M.D., 1893, Georgetown University. | | |
| D.D.S., 1898, Tacoma College Dental Surgery. | | |
| B.S., 1901, M.S., 1901, Columbian University. | | |
| <i>Topics</i> —Major, Neurology; Minors, Anatomy, Physiology. | | |
| Nin-Frias, Albert | Uruguay .. | 1410 21st Street. |
| B.A.S., 1907, Montevideo University. | | |
| <i>Topics</i> —Major, Sociology; Minors, Philosophy, English. | | |
| Orth, Henry, Jr..... | D. C. | 1011 L Street. |
| M.E., 1893, Lehigh University. | | |
| M.S., 1899, Columbian University. | | |
| <i>Topics</i> —Major, Chemistry; Minor, Chemistry. | | |
| Patrick, George Edward..... | Iowa | Dept. of Agriculture. |
| B.S., 1893, M.S., 1894, Cornell University. | | |
| <i>Topics</i> —Major, Chemistry; Minors, Bacteriology, Chemistry. | | |
| Phalen, William Clifton..... | Mass. | Geological Survey. |
| S.B., 1899, S.M., 1902, Massachusetts Institute of Technology. | | |
| <i>Topics</i> —Major, Geology; Minors, Petrography, Paleontology. | | |
| Pierce, Ulysses Grant Baker..... | D. C. | 1616 Riggs Place. |
| B.D., 1890, Hillsdale College. | | |
| <i>Topics</i> —Major, Philosophy; Minors, Æsthetics, English. | | |

- | Name. | Legal residence. | City address. |
|--|------------------|------------------------|
| Portner, Edward George..... | D. C. | Alexandria, Va. |
| B.S., 1897, M.S., 1898, Columbian University. | | |
| <i>Topics</i> —Major, Chemistry; Minor, Chemistry. | | |
| Roark, Ruric Creegan..... | Ky. | 900 14th Street. |
| B.A., 1907, University of Cincinnati. | | |
| M.A., 1908, University of Illinois. | | |
| <i>Topics</i> —Major, Bacteriology; Minors, Materia Medica, Pharmacology. | | |
| Ross, George Albert..... | Mo. | 2518 13th Street. |
| B.A., 1893, William Jewell College. | | |
| M.A., 1898, Columbian University. | | |
| <i>Topics</i> —Major, Mathematics; Minors, Education, Applied Mathematics. | | |
| Shepherd, William Thomas..... | Ark. | 442 Massachusetts Ave. |
| B.Sc., 1899, Ph.D., 1901, Gale College. | | |
| M.A., 1905, M.S., 1906, Oklahoma State University. | | |
| <i>Topics</i> —Major, Psychology; Minors, Philosophy, Education. | | |
| Smith, John William..... | D. C. | 125 11th Street, N. E. |
| A.B., 1901, Randolph-Macon College. | | |
| <i>Topics</i> —Major, Philosophy; Minors, History, Semitics. | | |
| Solyom, Herbert Louis..... | Md. | U. S. Patent Office. |
| B.S., 1902, M.S., 1903, Columbian University. | | |
| <i>Topics</i> —Major, Astro-Physics; Minors, Economics, Meteorology. | | |
| Stevens, William Spring..... | Me. | 1012 14th Street. |
| A.B., 1906, Colby College. | | |
| <i>Topics</i> —Major, Political Science; Minors, International Law, Economics. | | |
| Stiles, George Whitfield, Jr..... | Okla. | 4820 Iowa Ave. |
| B.S., 1900, Oklahoma Agricultural and Mechanical College. | | |
| M.D., 1905, The George Washington University. | | |
| <i>Topics</i> —Major, Bacteriology; Minors, Biochemistry, Medicine. | | |
| Townsend, Chas. Henry Tyler... | D. C. | National Museum. |
| B.S., 1908, The George Washington University. | | |
| <i>Topics</i> —Major, Zoölogy; Minors, Geology, Botany. | | |
| Waring, Luther Hess..... | Pa. | 1503 30th Street. |
| Graduate of Lutheran Theological Seminary, Gettysburg, Pa., 1896. | | |
| B.A. (pro forma), The George Washington University. | | |
| M.A., 1904, Columbian University. | | |
| <i>Topics</i> —Major, Germanics; Minors, Philosophy, Political Science. | | |

Name.	Legal residence.	City address.
Wilkinson, Oscar	Miss.	1404 L Street.
M.D., 1896, Tulane University.		
Ph.B., 1902, University of Mississippi.		
M.A., 1903, Columbian University.		
<i>Topics</i> —Major, Physiological Optics; Minors, Therapeutics, Medicine.		
Witherspoon, Thomas Alfred....	Tenn.	26 Iowa Circle.
1883, Graduated from U. S. Naval Academy.		
LL.B., 1891, M.S., 1897, Columbian University.		
<i>Topics</i> —Major, Chemistry; Minors, Chemistry, Electricity.		
Woodward, Sherman Melville....	Ariz.	Dept. of Agriculture.
M.S., 1893, Washington University, St. Louis.		
M.A., 1896, Harvard University.		
<i>Topics</i> —Major, Applied Mathematics; Minors, Mechanical Engineering, Hydraulic Engineering.		
Wrightson, James Owens.....	D. C.	812 20th Street.
<i>Topics</i> —Major, Sociology; Minors, Semitics, History.		
Zerhusen, Frank Xavier.....	Ky.	Holy Cross College, Brookland, D. C.
A.B., 1906, University of Notre Dame.		
<i>Topics</i> —Major, German; Minors, German, Semitics.		

UNDERGRADUATE COLLEGES AND DIVISIONS.

The following list includes all undergraduate students. The registration is indicated by the abbreviations: C.C. for Columbian College; Eng. for Washington College of Engineering; Arch. for Division of Architecture; Ed. for Division of Education. The letters c., e., and m., after the abbreviation Eng., indicate that the student is a candidate for the bachelor's degree in Civil, Electrical, or Mechanical Engineering; the absence of these letters indicates a special student.

Name.	Legal residence.	City address.
Abbe, Edward H., Ed.....	Mass. ..	The Baltimore.
M.D., Long Island College Hospital.		
Acker, Kemp Gerard, Eng.m.....	D. C. ..	913 16th Street.
Adams, B. Bouis, Arch.....	D. C. ..	2910 13th Street.
Adams, Raymond Edmond, Eng.c....	Pa.	707 22d Street.
Adams, Vera Elsie, C.C.....	D. C. ..	128 C Street, N. E.
Affleck, Mrs. Philip G., Ed.....	D. C. ..	3440 34th Place, Cleveland Park.
Alden, Anna Grace, C.C.....	D. C. ..	809 L Street.
Alden, Levietta Ruth, C.C.....	D. C. ..	809 L Street.
Allen, Anna, C.C.....	D. C. ..	1419 Q Street.
Alston, Larkin Roy, C.C.....	La.	1005 13th Street.

Name.	Legal residence.	City address.
Alvord, Katharine, C.C.....	D. C. ..	The Ontario.
Anderson, Henry Melville, C.C.....	D. C. ..	3042 R Street.
Arminger, S. Elmer, Arch.....	Md.	1527 I Street.
Atlee, Anna May, Ed.....	D. C. ..	1322 S Street.
Austin, Ella Morgan, C.C.....	D. C. ..	425 P Street.
Bache, Louise, C.C.....	D. C. ..	1326 R Street.
Baer, David Alphonse, C.C.....	D. C. ..	3044 N Street.
Bailey, Helen Carlotta, C.C.....	Mass. ..	1903 H Street.
Baker, Effie Kline, C.C.....	D. C. ..	1728 Columbia Road.
Baker, Jessie Esther, Ed.....	D. C. ..	1764 U Street.
Baker, John Earl, C.C.....	Wis.	2012 G Street.
Ph.B., 1906, University of Wisconsin.		
Baker, Wallace M., Eng.....	D. C. ..	2301 N Street.
Ball, W. C. Cooley, Eng.c.....	Md.	602 Park Road.
Balloch, Agnes McGrew, C.C.....	D. C. ..	1013 15th Street.
Barnes, Julian Francis, Eng.e.....	D. C. ..	2433 Wisconsin Avenue.
Bashford, Margaret J., Ed.....	Va.	Alexandria, Va.
Baston, George Henry, C.C.....	Me.	918 M Street.
Bauerman, Marian, Ed.....	D. C. ..	317 N Street, S. W.
Bayly, Howard Paul, Eng.c.....	D. C. ..	1333 11th Street.
Beale, Hilda, C.C.....	D. C. ..	1820 Kalorama Road.
Beckwith, Minerva Griswold, C.C...	Mich ..	1906 H Street.
Beekly, Albert Leon, C.C.....	Nebr. ..	1014 15th Street.
Beers, Anne, Ed.....	D. C. ..	117 4th Street, S. E.
Berry, James William, C.C.....	D. C. ..	14 3d Street, S. E.
Berry, Louise, Ed.....	Md.	1919 K Street.
Besselievre, Nellie Ecker, C.C.....	D. C. ..	315 E Street, N. E.
Betts, Ada Rebecca, Ed.....	D. C. ..	511 B Street, N. E.
Bicknell, Clarence Scott, C.C.....	Ill.	904 K Street.
Biondi, Harry James, Eng.....	D. C. ..	508 7th Street, S. E.
Blackley, R. Bassett, Arch.....	Texas ..	1412 Mass. Avenue.
Blasey, Joseph, Arch.....	D. C. ..	214 Arthur Place.
Bliss, Henry Harmon, C.C.....	D. C. ..	1923 15th Street.
Blount, Walter Eames, C.C.....	D. C. ..	3101 R Street.
Boesch, Paul Raymond, Eng.m.....	D. C. ..	616 E Street, N. E.
Bolton, Meade, Arch.....	D. C. ..	506 Iroquois Apt.
Bond, Lewis Franklin, Eng.c.....	Ill.	1206 Columbia Road.
Booth, Frank W., C.C.....	Iowa ...	1525 35th Street.
Botkin, Alice Sinclair, Ed.....	D. C. ..	The Burlington.
Boutell, Hugh Gates, C.C.....	Ill.	The Highlands.
Bowen, Mortimer, C.C.....	Va.	1025 22d Street.
Bowen, Seth Thomas, Eng.....	Ohio ...	1448 Rhode Island Ave.
Bowker, Charles H., C.C.....	D. C. ..	1310 Vermont Avenue.

Name.	Legal residence.	City address.
Brackett, Corinne Elizabeth, C.C....	D. C. ..	1464 Girard Street.
Braddock, George Harrison, Eng.e..	Md. ...	The Victoria.
Bradshaw, May Paul, Ed.....	D. C. ..	901 C Street, N. E.
Brakhagen, Minnie Hulda, C.C.....	D. C. ..	905 7th Street.
Brame, Arthur Hervey, Eng.e.....	D. C. ..	1317 10th Street.
Brandt, Milton W., Eng.e.....	Ohio ...	1634 15th Street.
Brashears, Irma, C.C.....	D. C. ..	1230 Euclid Street.
Breen, Mary Cecilia, C.C.....	D. C. ..	1357 U Street.
Bridge, Emily Louise, Ed.....	Mass. ..	Maple Street, Takoma Park, Md.
Briggs, Victoria, Ed.....	N. Y. ..	33 The Brunswick.
Britton, Carrie Evelyn, C.C.....	Pa.	311 C Street.
Brock, Ruth Elizabeth, Ed.....	D. C. ..	940 K Street.
Brock, Thomas S., Eng.....	D. C. ..	1430 W Street.
Brodie, Ralph, Arch.....	D. C. ..	609 Florida Ave.
Brooks, Courtland, C.C.....	D. C. ..	1634 15th Street.
Brown, Elizabeth Virginia, Ed.....	Mo. ...	1357 Euclid Street.
Brown, Helen Maria, Ed.....	N. Y. ..	1309 17th Street.
Brown, Mary, Ed.....	D. C. ..	2464 Ontario Road.
Browning, Anna Melrose, C.C.....	D. C. ..	3212 Newark Street, Cleveland Park.
Bruder, William Edward, C.C.....	Ohio ...	2211 I Street.
Buckingham, Nevell, Arch.....	D. C. ..	134 C Street, N. E.
Buckler, Albert, Eng.....	Pa.	16 3d Street, S. E.
Bullough, George Van Ness, C.C....	D. C. ..	122 Tenn. Ave., N. E.
Bundick, Harriet Ellen, Ed.....	Va.	716 12th Street.
Burchard, Edwin Day, Eng.c.....	D. C. ..	1113 S Street.
Burden, Katherine, C.C.....	D. C. ..	The Franklin.
Burke, Arthur, Ed.....	D. C. ..	2114 O Street.
Burklin, Robert Reyburn, C.C.....	D. C. ..	1131 Girard Street.
Burnett, Lyle B., C.C.....	Mo.	1713 G Street.
Burnett, Roy Edgar, C.C.....	D. C. ..	1307 R Street.
Burrell, William W., Eng.m.....	Pa.	2129 Pennsylvania Ave.
Butler, Charles Marshall, C.C.....	D. C. ..	1535 I Street.
Butman, Carl Hawes, Eng.m.....	Mass. ..	1700 15th Street.
Cain, John Rice, C.C.....	D. C. ..	1237 Kenyon Street.
Call, Loren Heinlein, Eng.e.....	D. C. ..	1448 Newton Street.
Calvert, Landon Ralls, Eng.....	Va.	1804 G Street.
Cameron, Myrle, C.C.....	D. C. ..	16th and Emerson Sts.
Campbell, Harry Hamilton, Eng.c...D.	C. ..	1723 G Street.
Campbell, James Lawrence, Jr., Arch.	Va.	1977 Biltmore Street.
Campbell, W. Ray, Arch.....	N. J. ...	1120 13th Street.
Campbell, Worthington Clarke, Eng.e.	Md.	1750 Euclid Street.

Name.	Legal residence.	City address.
Card, George Franklin, Eng.....	Mo.	3043 P Street.
Carpenter, Essex Porter, Eng.e.....	D. C. ..	1921 G Street.
Carpenter, Lillian Evans, Ed.....	D. C. ..	205 D Street, N. E.
Carraher, Margaret Mary, Ed.....	D. C. ..	504 6th Street, S. W.
Carraher, Rose Gertrude, Ed.....	D. C. ..	504 6th Street, S. W.
Carty, Roy F., Eng.m.....	D. C. ..	Bureau of Standards.
Cash, Edith Katherine, C.C.....	D. C. ..	126 Tenn. Ave., N. E.
Cash, Lilian Claire, C.C.....	D. C. ..	126 Tenn. Ave., N. E.
Cash, W. Bogart, Arch.....	N. C. ..	2516 17th Street.
Chadwick, George Albert, Eng.....	N. J. ..	623 So. Fairfax Street, Alexandria, Va.
Chambers, Charles Edwin, Eng.c....	N. Y. ..	1360 B Street, S. E.
Charlton, Mrs. Paul, Ed.....	D. C. ..	1712 H Street.
Charlton, Robert, C.C.....	D. C. ..	1712 H Street.
Cheshire, Lilie Alice, C.C.....	D. C. ..	125 11th Street, S. E.
Chubb, Herman Blaney, C.C.....	D. C. ..	The Mendota.
Church, Christine Merrick, C.C.....	D. C. ..	626 N. C. Ave., S. E.
Clagett, Henry Noble, Eng.....	Md.	1748 S Street.
Clark, Bennett Champ, C.C.....	Mo.	The Toronto.
Clark, Frank R., Eng.....	Utah ..	36, Imperial Apt.
Clark, Henry Culbertson, C.C.....	D. C. ..	Takoma Park, D. C.
Clift, Linda Lee, C.C.....	D. C. ..	163 U Street.
Clyne, J. V., Eng.....	Ill.	909 13th Street.
Coburn, Walter DeMeritt, C.C.....	D. C. ..	720 22d Street.
Coburn, William Turley, Eng.....	D. C. ..	2959 Tilden Street.
Cochran, Ruth Gilbert, C.C.....	Colo. ..	1748 Corcoran Street.
Cochrane, John Edw. Walker, Eng.c.D. C. ..		1416 K Street.
Cockrell, Henry Ewing, C.C.....	Mo.	1518 R Street.
Cockrell, Selwyn Kennedy, C.C.....	D. C. ..	216 11th Street.
Coe, Mayne Reid, C.C.....	N. C. ..	Langdon, D. C.
Coleman, Thomas Carlisle, Eng.....	D. C. ..	The Westover.
Collins, Joseph Francis, Ed.....	D. C. ..	2049 9th Street.
Compton, Edith Lee, Ed.....	D. C. ..	1121 Euclid Street.
Conboye, William T., Eng.c.....	D. C. ..	311 M Street.
Connelly, Mary, Ed.....	D. C. ..	1438 S Street.
Connor, Daniel Allman, Eng.c.....	D. C. ..	130 D Street, S. E.
Connor, Louis George, C.C.....	D. C. ..	626 L Street, N. E.
Conwell, Rollin Nichol, Eng.e.....	Ind.	1302 Columbia Road.
Cooke, May Thacher, C.C.....	Colo. ..	1328 12th Street.
Coolidge, Helen Moody, Ed.....	D. C. ..	1419 R Street.
Corson, Edna Lois, C.C.....	D. C. ..	1154 17th Street.
Covell, David Ransom, C.C.....	N. Y. ..	3221 11th Street.
Craig, Harold Kennedy, Eng.c.....	D. C. ..	2206 1st Street.

Name.	Legal residence.	City address.
Craig, Marion Edith, C.C.....	Va.	2206 1st Street.
Craighill, Susan Robins, Ed.....	Va.	3062 Q Street.
Cranston, Claudia, C.C.....	Texas ..	1467 Irving Street.
Crockett, Joseph A., Eng.m.....	D. C. ..	208 11th Street, N. E.
Croswell, Nannie B., Ed.....	D. C. ..	1327 Mass. Ave., S. E.
Crowe, John Joseph, C.C.....	D. C. ..	Bladensburg Road.
Crown, James Edmond, C.C.....	D. C. ..	221 10th Street, S. E.
Cummins, Albert Forest, C.C.....	Pa.	221 11th Street, S. E.
Curl, Joseph Ryland, C.C.....	D. C. ..	2312 I Street.
Curran, William J. F., C.C.....	D. C. ..	305 1st Street, S. E.
Curtis, Myron Seaton, Eng.m.....	Md.	Chevy Chase, Md.
Cushing, Harriet Morrill, C.C.....	D. C. ..	1333 N Street.
Dague, Roswell, C.C.....	Wash. .	930 18th Street.
Dahn, Franz F. W., C.C.....	Minn. ..	1515 O Street.
Daniels, Ara Marcus, Eng.e.....	D. C. ..	The Portner.
Dans, José P., Eng.....	P. I. ...	Coast & Geodetic Survey.
Davidson, William Falconer, Eng.c....	N. C. ..	1226 Evarts Street, N. E.
Davies, Joseph Alfred, C.C.....	Ind.	1528 Rosedale St., N. E.
Davies, Robert Gardner, Eng.m....	D. C. ..	1004 N. C. Ave., S. E.
Davis, Adelaide, Ed.....	Mass. ..	213 C Street, S. E.
Davis, Estelle Hance, Ed.....	Va.	403 B Street, N. E.
Davis, Rena Preston, C.C.....	D. C. ..	2212 1st Street.
Deacon, Ralph D., C.C.....	S. D. ..	1719 G Street.
Dean, Mary Owen, Ed.....	D. C. ..	1507 Park Road.
B.A., Woman's College, Baltimore, Md.		
Deland, Eugenie, Ed.....	D. C. ..	507 T Street.
Denham, Ruth Milicent, C.C.....	D. C. ..	Manor House.
Denning, William Ira, C.C.....	Ga.	The Loretto.
DeRiemer, Arthur Hyde, Eng.....	Ill.	1461 Chapin Street.
Deyo, Clarence Eugene, C.C.....	Conn. ..	Treasury Department.
Dick, George Wesley, Eng.....	D. C. ..	322 8th Street, N. E.
Dilger, Eric, C.C.....	Va.	Cor. 26th, D St., and Water St.
Dodge, Edna May, Ed.....	D. C. ..	610 F Street, N. E.
Doing, Jennie E., C.C.....	D. C. ..	1311 K Street.
Dolbey, Frank Crofutt, Eng.....	D. C. ..	740 13th Street, S. E.
Donk, Marion Gilbert, Eng.c.....	Fla.	35, The Brunswick.
Donk, Peter, Ed.....	Fla.	35, The Brunswick.
Donovan, Frances Helen, C.C.....	D. C. ..	1677 31st Street.
Doran, Helen Fay, C.C.....	D. C. ..	2129 L Street.
Dortch, Mary Harris, C.C.....	Tenn. ..	1510 Park Road.
Dougherty, Howard Francis, Eng.c....	Md.	824 13th Street.
Douglas, Willard Raymond, Eng....	D. C. ..	Nat'l Elec. Supply Co.

Name.	Legal residence.	City address.
Duvall, Mary Morsell, Ed.....	D. C. ..	1831 M Street.
Doyle, Burton Jarvis, Arch.....	D. C. ..	632 C Street, N. E.
Draper, Henry White, Ed.....	D. C. ..	1303 Fairmont Street.
LL.B., 1903, LL.M., 1904, National University.		
Dugan, John A., Eng.m.....	D. C. ..	3419 Dent Place.
Dugan, Rose Ann, Ed.....	D. C. ..	1321 Corcoran Street.
Dulin, Wm. Shelton Gordon, Eng.c....	D. C. ..	1420 Pennsylvania Ave.
Dunbar, Ralph McNeal, C.C.....	Md.	Y. M. C. A.
Dwyer, John Rockford, Eng.c.....	D. C. ..	628 F Street, S. W.
Dyson, Arnold Horton, Eng.c.....	R. I. ...	3008½ R Street.
Earl, Merritt, C.C.....	Wis. ...	Bu. of Indian Affairs.
Earll, Donald Montgomery, C.C....	Md.	Chevy Chase, Md.
Easterday, George Winship, Eng.e....	D. C. ..	1681 31st Street.
Eatherly, Walter Scott, C.C.....	Tenn. ..	1002 K Street.
Eaton, Ernest Risley, C.C.....	Australia	Y. M. C. A.
Ebbetts, Warner Addison, Arch.....	Conn. ..	811 13th Street.
Ebeling, A. H., Arch.....	N. Y. ..	U. S. Naval Med. School Hospital.
Eberly, C. F., C.C.....	Ohio ...	1733 19th Street.
Eckstein, Josephine E., C.C.....	D. C. ..	3361 18th Street.
Edelen, George S., C.C.....	Md.	The Coywood.
Edwards, Carleton Ula, Eng.....	Ark. ...	1701 Adams Street, N. E.
Eisenberg, Arthur Alexander, C.C..	Russia ..	1213 4½ Street, S. W.
Ellis, Harry Van Horn, C.C.....	D. C. ..	203 C Street, N. E.
Ellis, Ralph Thomas, C.C.....	Del. ...	Y. M. C. A. Bldg.
Elwood, William Adams, Eng.c.....	D. C. ..	635 F Street, N. E.
Emerich, Irma, Ed.....	D. C. ..	1847 Calvert Street.
Engel, Morris Edward, Eng.m.....	Pa.	1016 S. C. Ave., S. E.
England, Howard H., C.C.....	D. C. ..	5702 Brightwood Ave.
Engle, Claude Hanke, Ed.....	D. C. ..	603 Mass. Ave., N. E.
English, Annie, C.C.....	D. C. ..	1215 N Street.
Estler, Harry Smith, Eng.m.....	Va.	1245 31st Street.
Estey, Kate M., Ed.....	D. C. ..	2504 Cliffbourne Pl.
Ettenger, Anne Lee, C.C.....	Ind. ...	1507 Lamont Street.
Everett, Frank Orear, C.C.....	Mo.	916 14th Street.
Fant, Jessie DuBois, Ed.....	Idaho ..	115 12th Street, S. E.
Farnham, Arthur Blanchard, Eng.c....	D. C. ..	1733 R Street.
Farrington, Charlotte R., C.C.....	Minn. ...	3014 Dent Place.
Farwell, Clarence Gilbert, C.C.....	Mass. ..	2217 Pennsylvania Ave.
Fehr, J. Ralph, Eng.e.....	Ill.	Patent Office.
Fendley, Joseph Martin, C.C.....	Ga.	2218 Pennsylvania Ave.
Finch, Elmer Harrison, Eng.c.....	Mich. ..	1211 Q Street.
Finckel, William Henry, Jr., Eng.m.	D. C. ..	1625 S Street.

Name.	Legal residence.	City address.
Firmin, John Clingan, Arch.....	D. C. ..1438	Harvard Street.
Fisher, Dwight Wilton, C.C.....	D. C. ..1921	G Street.
Fitch, Theodore Allen, C.C.....	D. C. ..3126	16th Street.
Fitch, William Reed, C.C.....	N. D. ..2003	G Street.
Fitzsimons, Ellen White, C.C.....	Ala. ...1412	Massachusetts Ave.
Fleming, John Paton, C.C.....	D. C. ..1847	Wyoming Ave.
Fleming, W. H. Irwin, Arch.....	Va. ....1847	Wyoming Ave.
B.S. in Arch., 1906, The George Washington University.		
Forbes, Annie Lewis, Ed.....	Ky. ....1538	I Street.
Ford, Helen, Ed.....	D. C. ..	The Mendota.
Forfar, Adelina Wright, Ed.....	Wis. ...1326	Euclid Street.
Foster, Carrington, Arch.....	Va. ....1323	Q Street.
Foster, Ethel E., Ed.....	D. C. ..19	Iowa Circle.
Foster, Esther, C.C.....	D. C. ..119	W Street.
Foster, Ruth, C.C.....	D. C. ..119	W Street.
Fowler, Ruth, Ed.....	Ind. ....1834	Euclid Street.
Frank, Mary Woods, C.C.....	D. C. ..1003	Otis Place.
Freeman, Alice L., Ed.....	S. C. ..1831	V Street, S. E.
Freeman, Leroy A., Eng.....	D. C. ..46	V Street.
Freeman, Louis George, Eng.e.....	D. C. ..1700	Columbia Road.
Frey, Ralph Wylie, C.C.....	D. C. ..1343	Q Street.
Frick, George Frederick, Eng.....	Pa. ....1838	4th Street.
Fuerst, George M., Arch.....	Wis. ...1827	H Street.
Fuchs, Henry, Eng.e.....	Mo. ....11½	Grant Place.
Fuller, Aubrey Vail, C.C.....	D. C. ..2318	1st Street.
Fulmer, Howard D., Arch.....	Pa. ....1813	16th Street.
Galiher, Blanche Pauline, Ed.....	Ill. ....436	6th Street, N. E.
Gannett, Eleanor, C.C.....	D. C. ..2556	University Place.
Gardner, Helen B., Ed.....	D. C. ..623	East Capitol Street.
Garnett, Henry Wise, C.C.....	D. C. ..1409	Hopkins Place.
Garland, Alexander, Jr., Arch.....	Peru ...334	Indiana Ave.
Gary, Howland R., Eng.m.....	Va. ....R. F. D. No. 2,	Alexandria, Va.
Geare, Reginald W., Arch.....	D. C. ..10th and	Otis Streets.
Geschickter, Jeanette, C.C.....	D. C. ..1239	12th Street.
Gibbons, Jessie Ercell, C.C.....	D. C. ..1314	N. C. Ave., N. E.
Gill, Wilbur D., Eng.c.....	D. C. ..1925	Calvert Street.
Gilliss, Helen, Ed.....	Va. ....1307	Kenyon Street.
Given, Mary Ella, Ed.....	D. C. ..	The Olympia.
Glass, Edward L. N., C.C.....	N. J. ..1733	P Street.
Goding, Anne M., Ed.....	D. C. ..1419	Rhode Island Ave.
Godoy, George, Arch.....	Calif. ..1006	16th Street.

Name.	Legal residence.	City address.
Goicouria, Pedro P., C.C.....	P. R. ..	Cor. 25th and E Streets.
Goodrich, Queenie Anna, C.C.....	Ill.	1538 I Street.
Gover, William Thornton, Ed.....	Va.	Manassas, Va.
Grady, Ryan Armistead, C.C.....	D. C. ..	1521 29th Street.
Graff, Leva Burton, C.C.....	Ill.	Dewey Hotel.
Graham, Claudia VanNette, Ed.....	D. C. ..	1125 6th Street.
Graham, George Vernon, C.C.....	D. C. ..	3552 10th Street.
Graham, Jerome Montrose, Arch....	D. C. ..	1407 16th Street.
Graham, Jeannie True, Ed.....	Ky.	1538 I Street.
Green, Elsie Eugenia, C.C.....	D. C. ..	600 23d Street.
Greenburg, Louis, Arch.....	D. C. ..	612 N Street.
Greenwood, Mary Maud, Ed.....	D. C. ..	1360 Columbia Road.
Griffin, Harry Kemp, C.C.....	Ill.	Bureau of Standards.
Gudmunsen, Isaac Ray, C.C.....	Idaho ..	520 F Street, N. E.
Gwinn, Thomas Ross, Eng.e.....	Md.	1645 K Street.
Hackett, William T., Eng.c.....	D. C. ..	1129 Fairmont Street.
Haddaway, S. K., Eng.....	Pa.	715 A Street, S. E.
Haller, Thomas Edward, Arch.....	D. C. ..	447 Lamont Street.
Halsey, Arthur Sherman, Eng.....	Pa.	207 East Capitol Street.
Hamilton, Charles Burwell, Eng.m..	D. C. ..	1032 Lamont Street.
Hamilton, Walter Clarence, Eng....	D. C. ..	406 6th Street, S. E.
Hansen, Otto W., Eng.c.....	Ill.	1808 H Street.
Hardester, John S., Eng.....	D. C. ..	Congress Heights, D. C.
Hardy, Margaret Bourde, Ed.....	Va.	638 E. Capitol Street.
Harrison, Hattie, C.C.....	Va.	3100 R Street.
Harrison, Robert Horace, Eng.c....	D. C. ..	2208 1st Street.
Hart, Charles, Ed.....	D. C. ..	515 B Street, N. E.
Hart, Raymond Sager, Arch.....	D. C. ..	1536 6th Street.
Hart, William Lee, C.C.....	S. C. ...	Washington Barracks.
M.D., 1906, University of Maryland.		
Hartman, Joseph Vance, C.C.....	Ind.	226 11th Street.
Hartmann, Wilhelmine Cornelia, C.C.D.	C. ..	The Berkshire.
Haslup, Alice Elma, Ed.....	D. C. ..	2114 18th Street.
Hatch, Jeanne M., Ed.....	N. J. ..	The Mendota.
Hathaway, Lillie Theresa, C.C.....	Ohio ...	Treasury Department.
Hauser, Edna Emma, C.C.....	D. C. ..	1729 1st Street.
Hawkins, Margaret, Ed.....	Md.	2313 Washington Circle.
Haycock, Robert Lee, Ed.....	D. C. ..	Industrial Home School.
Hayden, Elizabeth Anne, Ed.....	N. Y. ..	1408 Belmont Street.
Hayton, Charles Henry, C.C.....	So. Afr.	Takoma Park, D. C.
Hazard, Samuel Tilden, Eng.c.....	D. C. ..	1004 B Street, S. E.
Heald, Lenore, C.C.....	D. C. ..	Takoma Park, D. C.
Heilprin, Marion, C.C.....	D. C. ..	2620 University Place.

Name.	Legal residence.	City address.
Heitmuller, George Roeder, C.C....	D. C. ..	1307 14th Street.
Henderson, John Wagner, C.C.....	Md.	1819 Kalorama Road.
Hendley, Flora L., Ed.....	D. C. ..	1216 L Street.
Hendry, M. Leland, C.C.....	Md.	Bethesda, Md.
Herndon, John Goodwin, Jr., C.C...	Ala. ...	1305 P Street.
Herndon, Neal N., Eng.....	Ala. ...	1515 Vermont Ave.
Hess, Eva, C.C.....	D. C. ..	1221 Newton St., N. E., Brookland, D. C.
Hession, John H., Eng.c.....	Mass. ..	1419 W Street.
Hiatt, Mabel Brown, C.C.....	Iowa ...	1414 Hopkins Street.
Higginbotham, Richard Frank, C.C..	Ind. ...	House of Rep.
Hill, Elsie Mary, C.C.....	Conn. ..	The Burlington.
A.B., 1906, Vassar College.		
Hill, Florence A., C.C.....	D. C. ..	933 Westminster Street.
Hill, Walter Ormsby, C.C.....	Mo.	1006 B Street, S. W.
Hilleary, Mary Beatrice, Ed.....	D. C. ..	3314 P Street.
Hobson, Frank Millard, Eng.e.....	Va.	2013 G Street.
Hoffman, Edwin S., Eng.e.....	Pa.	523 B Street, N. E.
Holcombe, William Henry, Eng.c...	Ind. ...	1829 Corcoran Street.
Holden, John Greene, Eng.c.....	Md.	Amer. Sec. & Trust Co.
Holland, Adrian C., Eng.e.....	Texas ..	1528 1st Street.
Holmes, Mrs. Kate Osgood, Ed....	D. C. ..	1444 Belmont Street.
Holmes, Osgood, Arch.....	D. C. ..	1444 Belmont Street.
Holmes, Phoebe, Ed.....	D. C. ..	2307 18th Street.
Holmes, Rexford Louie, C.C.....	Ill.	1114 D Street, N. E.
LL.B., 1908, The George Washington University.		
Holmes, Ronald M., C.C.....	D. C. ..	726 3d Street, N. E.
Honn, Harlan Verne, Eng.e.....	D. C. ..	400 8th Street, N. E.
Honsberg, Emil Ernest, Eng.....	Ohio ...	1103 17th Street.
Hooton, Philip Rogers, Arch.....	D. C. ..	1005 Mass. Ave., N. E.
Hoover, Joseph Raymond, C.C.....	D. C. ..	1118 9th Street.
Hopkins, Edwin B., C.C.....	D. C. ..	The Rockingham.
Horgan, Francis Vincent, Eng.c...	D. C. ..	733 13th Street.
Hornung, Elmer Engelken, Arch....	Iowa ...	1313 K Street.
Horstman, William Henry, Arch....	Mo.	418 6th Street.
Hough, Edgar Joseph, Eng.m.....	D. C. ..	1515 O Street.
Hough, Roland P., Eng.c.....	Va.	Ballston, Va.
Howard, Frank A., Eng.m.....	D. C. ..	1800 S Street.
Howard, Mary, C.C.....	Neb. ...	16 R. I. Ave., N. E.
Howell, Ralph William, C.C.....	D. C. ..	612 17th Street.
Hoyme, G. L., Arch.....	Va.	53 U Street.
Hronik, Joseph, C.C.....	Iowa ...	823 21st Street.
Huff, Carrie, C.C.....	Miss. ..	1702 F Street.

Name.	Legal residence.	City address.
Hughes, William G., Eng.m.....	D. C.	..The Eutaw Apt.
Hummer, Elizabeth Alice, C.C.....	D. C.	..638 East Capitol Street.
Hunter, Annie Rachel, C.C.....	D. C.	..1211 34th Street.
Hunter, Gertrude, Ed.....	D. C.	..1445 Massachusetts Ave.
Hunting, Horace Parsons, Eng.m..	N. Y.	..The Alabama, Apt. 207.
Hurley, John J., Jr., Eng.c.....	D. C.	..60 K Street.
Ingersoll, Edwin Henry, C.C.....	D. C.	..Bu. Animal Industry.
Irby, Robert Garland, C.C.....	D. C.	..1348 Euclid Street.
Jackson, Maude L., C.C.....	D. C.	..3630 13th Street.
Jacobs, Benjamin Richard, C.C.....	Calif.	..Bureau of Chemistry.
Jeffrey, Frank Rumer, C.C.....	Wash.	..823 21st Street.
Jenkins, Oliver Lloyd, Eng.m.....	Ind.	...718 N. C. Ave., S. E.
Johnson, Charles Albert, Ed.....	D. C.	..2011 S Street.
Johnson, Ross Holbrook, C.C.....	D. C.	..1804 Belmont Road.
Johnson, Mrs. Sara Pierson, Ed....	Va.	....4107 Connecticut Ave.
Johnston, Mildred Floyd, Ed.....	D. C.	..1762 N Street.
Jones, Cyrus Alexander, C.C.....	Ill.	....Chevy Chase, Md.
Jones, Eleanor Isabelle, C.C.....	Ohio	...426 Luray Place.
Jones, Mary Glenn, Arch.....	Va.	....1527 I Street.
Jones, Robert Pepin, C.C.....	Mass.	..301 Md. Ave., N. E.
Justement, Louis Henri E., Arch....	N. Y.	..914 L Street.
Kalb, Dorothy Buhrman, Ed.....	D. C.	..1535 T Street.
Keathley, Lillie V., C.C.....	N. C.	..The Concord.
Keats, Harold, C.C.....	D. C.	..1806 S Street.
Keeton, Daniel M., C.C.....	Texas	..2437 N Street.
Kelley, Mark M., C.C.....	Calif.	..1110 L Street.
Kengla, Herbert Lorenza, Eng.c....	D. C.	..2924 Wisconsin Ave.
Kennedy, Charles Bayard, Eng.e....	D. C.	..1304 13th Street.
Kennedy, John Thomas, C.C.....	Pa.	....Y. M. C. A. Bldg.
Kerlin, John G., C.C.....	N. J.	..933 H Street.
King, Winifred Mary, C.C.....	D. C.	..1803 14th Street.
Kinsell, Rex Emir, C.C.....	Iowa	...1335 Mass. Ave., S. E.
Klee, Charles Raymond, Arch.....	N. Y.	..3224 R Street.
Knowles, William Alexander, Arch..	D. C.	..U. S. Nat'l Museum.
Kramer, Frank Henry, Eng.....	D. C.	..506 3d Street, S. E.
Kuan, Ching-lin, C.C.....	China	..2001 19th Street.
Lamb, James Ewing, Ed.....	Md.	...1322 I Street.
Lane, Marian Ursula, Ed.....	Eng.	...1126 Connecticut Ave.
Lasley, Dana McGuffey, Eng.m....	D. C.	..The Albemarle.
Latimer, Philip Averitt, Eng.c.....	D. C.	..226 12th Street, S. E.
Lattleslund, Hilda M., Ed.....	N. D.	..1223 Vermont Ave.
Lawrence, Glenn Rupert, Eng.c.....	D. C.	..3425 14th Street, Brookland, D. C.

Name.	Legal residence.	City address.
Lawson, Margaret Lucile, Ed.....	N. C. ..	815 C Street, N. E.
Lazard, Henry, Ed.....	France ..	1341 L Street.
Leaman, Melvin G., C.C.....	Md.	Chevy Chase, Md.
Lee, Ralph Everett, C.C.....	Mass. ..	320 6th Street, N. E.
Leonard, William Michael, Eng.ε....	D. C. ..	520 G Street, N. E.
Lepper, Henry Albert, C.C.....	D. C. ..	1620 6th Street.
Liebschutz, Eugenie, Ed.....	France ..	1527 Newton Street.
Lind, John Edward, C.C.....	Iowa ...	506 A Street, N. E.
Lindsay, Alfred Briscoe, C.C.....	D. C. ..	1809 18th Street.
Litchfield, Henry Edward, Eng.ε....	D. C. ..	1240 Half Street, S. E.
Little, Agnes Inch, Ed.....	D. C. ..	332 Md. Ave., N. E.
Little, May K., C.C.....	Ga.	131 A Street, N. E.
Littlejohn, Howard Irwin, C.C.....	Nebr. ..	607 4th Street.
Littell, Mabel Shaw, C.C.....	D. C. ..	The Baltimore.
Longley, Clifford B., C.C.....	Ill.	The Sterling.
Lord, Kenneth Prince, C.C.....	D. C. ..	The Concord.
Lovering, George Varnum, C.C.....	Mass. ..	Interstate Commerce Commission.
Lowe, Edith, C.C.....	D. C. ..	2622 Woodley Place.
Lower, John Haworth, Eng.....	N. Y. ..	The Marlborough.
Lucas, Anthony Fitzgerald, Jr., Eng.	D. C. ..	1406 16th Street.
Lucas, Leah Roberta, C.C.....	D. C. ..	1612 1st Street.
Luers, George Arthur, Eng.....	Md.	The Cumberland.
Lusby, Charles Edward, C.C.....	D. C. ..	2909 O Street.
Lynch, Laura Virginia, C.C.....	D. C. ..	128 East Capitol Street.
McAuley, Hugh Nesbit, Arch.....	D. C. ..	530 21st Street.
McCalip, Curtis Edgar, Eng.m.....	Ind.	The Lincoln, Apt. 17.
McCarthy, Charles Henry, C.C.....	D. C. ..	702 19th Street.
McCarthy, Joseph Henry, Eng.....	D. C. ..	609 2d Street.
McColm, Anna May, Ed.....	Iowa ...	The Olympia.
McConnell, Harry Raymond, Eng.m.	Va.	601 N. C. Ave., S. E.
McDermott, Frank Alexander, C.C..	D. C. ..	25th and E Streets.
McGovern, Francis J., C.C.....	R. I. ..	702 19th Street.
McGraw, Fred M., C.C.....	N. Y. ..	Takoma Park, Md.
McGuffey, Margaret Drake, Ed.....	D. C. ..	926 17th Street.
McKee, Mabel Park, Ed.....	D. C. ..	615 Md. Ave., N. E.
McKnight, Nannie J., Ed.....	Ohio ...	3037 Dumbarton Ave.
McLean, Harry Clay, Jr., C.C.....	D. C. ..	1373 Irving Street.
McLear, Alice Bush, Ed.....	Del.	1307 W. 13th Street, Wilmington, Del.
McPike, Martin John, Eng.c.....	Pa.	812 1st Street.
Malnati, Antoinette, Ed.....	D. C. ..	712 East Capitol Street.
Manning, Thomas R., Eng.c.....	Pa.	26 2d Street, N. E.

Name.	Legal residence.	City address.
Manville, Loren Robert, Eng.c.....	S. D. ..	1515 O Street.
Marcus, Mandel, C.C.....	Ill.	224 Indiana Ave.
Maret, Jeanne, Ed.....	Switzerland.	1719 13th Street.
Marr, Anna, C.C.....	D. C. ..	1818 S Street.
Marsh, Allen Johnson, C.C.....	D. C. ..	McKinley Manual Training School.
Marsh, Mrs. Charlotte Evans, Ed....	Md.	324 Indiana Ave.
Marsh, Charles Wilder, C.C.....	D. C. ..	3430 Brown Street.
Martin, James Luther, C.C.....	Md.	Baltimore, Md.
Marvin, Francis Edwin, Eng.e.....	D. C. ..	606 F Street, N. E.
Maryan, William Sturdivant, C.C....	Va.	1135 12th Street.
Marye, Tench Tilghman, C.C.....	D. C. ..	1526 20th Street.
Mason, Josephine Dwight, Ed.....	Mass. ..	132 A Street, N. E.
Masters, Lilla V., Ed.....	D. C. ..	2055 Wisconsin Ave. A.B., Wellesley College.
Mattingly, Gentry Heard, Eng.e....	D. C. ..	475 F Street, S. W.
Maurer, Ruth Walden, Ed.....	Ohio ...	The Nelson.
Mayne, John Clarke, C.C.....	D. C. ..	4201 Brightwood Ave.
Maxcy, Kenneth Fuller, C.C.....	D. C. ..	1118 Rhode Island Ave.
Megee, Mary Lena, Ed.....	Texas ..	Grant Road.
Meyer, Will Beck, C.C.....	D. C. ..	609 P Street.
Middleton, Arthur Pierce, C.C.....	D. C. ..	1228 Fairmont Street.
Miller, Clarence William, Eng.e....	Ind.	821 11th Street.
Miller, Dayton Baird, C.C.....	D. C. ..	15 Quincy Place.
Millington, Yale O., C.C.....	D. C. ..	1009 Newton St., N. E.
Moneyway, James Lewis, C.C.....	Ala.	1454 Fairmont Street.
Monk, Ella May, Ed.....	N. Y. ..	1812 G Street.
Monroe, Edgar Hewitson, Eng.....	D. C. ..	901 Virginia Ave., S. W.
Moody, Theodore Lyman, Eng.c....	Md.	1512 P Street.
Moore, Frances DuBois, Arch.....	N. Y. ..	Public Library.
Moore, Kate Carroll, Ed.....	D. C. ..	224 15th Street.
Moore, Lee Varick, C.C.....	N. C. ..	1219 Q Street.
Moore, Susanne A., Ed.....	D. C. ..	1308 Girard Street.
Morgan, M. Ella, Ed.....	D. C. ..	2750 14th Street.
Morton, Carrie L., C.C.....	D. C. ..	200 A Street, S. E.
Muncey, Eliot May, C.C.....	D. C. ..	1337 R Street.
Munroe, Dorothy Barker, Ed.....	R. I. ...	2115 S Street.
Myers, Charles Claude, C.C.....	D. C. ..	1804 14th Street.
Myers, Henry Bernard, Eng.c.....	Md.	1412 Columbia Street.
Myers, John D., C.C.....	D. C. ..	The Vermont.
Newbold, Katharine Mitchell, C.C..	D. C. ..	1362 Kenyon Street.
Newhouser, Roy Lyman J., C.C....	Pa.	217 East Capitol Street.
Newton, Grace Gadsdon, Ed.....	D. C. ..	1452 Fairmont Street.

Name.	Legal residence.	City address.
Newton, Margaret, Ed.....	D. C. ..	1625 R Street.
Nicholson, Helen Sellman, C.C.....	D. C. ..	2821 Q Street.
Nicholson, Percival H., Eng.....	Md.	Bureau of Education.
Nickerson, Chester Arthur, C.C....	Wis.	1739 F Street.
Nickel, William Frederick, Eng.e....	Md.	1333 12th Street.
Nicolson, Geo. Dudley Gordon, Eng. Va.	Navy Dept., Bu. Con. & Rep.	
Nielsen, Joseph Nicolay, Arch.....	Minn. ..	1615 Florida Ave.
Nin-Frias, Helena, C..C.....	Uruguay.	1410 21st Street.
Nutt, George Sinclair, C.C.....	Ill.	617 C Street, N. E.
Oehmann, John William, Eng.....	D. C. ..	507 Stanton Place, N. E.
Olesen, Walter Alexis, Eng.e.....	Minn. ..	644 E Street, N. E.
Olmstead, Mary Pauline, C.C.....	Minn. ..	130 East Capitol Street.
Ord, Gladys Anne, C.C.....	Md.	Chevy Chase, Md.
O'Rourke, John, Arch.....	D. C. ..	Station A, 2472.
Ortiz, Miguel, Eng.e.....	Mexico .	1002 M Street.
Osgood, Rose Cornelia, C.C.....	N. Y. ..	The Victoria.
Osterhout, Karl Jackson, C.C.....	Pa.	613 C Street, S. E.
Outwater, Mrs. Kate Sorrell, Ed....	Va.	620 F Street, S. W.
Owens, Norris Wilbur, Ed.....	Md.	315 R Street.
Palmer, Elizabeth D., Ed.....	Conn.	1331 Fairmont Street.
Padgett, Harold Dement, Eng.c.....	Md.	816 18th Street.
Panopio, Eliseo M., Eng.....	P. I.	Coast & Geod. Survey.
Pardee, Elmer Witmer, Eng.e.....	N. Y.	916 19th Street.
Parkhurst, Benjamin, C.C.....	D. C. ..	1135 12th Street.
Parry, William, Eng.e.....	Pa.	1328 New York Ave.
Parsons, Beulah Elizabeth, Ed.....	D. C. ..	1229 15th Street.
Patchell, Fred James, C.C.....	D. C. ..	357 N Street, S. W.
Patterson, Ruth Capelle, Ed.....	D. C. ..	2016 15th Street.
Patterson, Russell Brown, Eng.c....	D. C. ..	2016 15th Street.
Peck, Caro B., Eng.....	D. C. ..	603 Howard Place.
Perry, Mabel, Ed.....	Conn.	1758 Q Street.
Pellett, Mirl Edison, C.C.....	D. C. ..	2120 H Street.
Pepper, Nora Rose, C.C.....	D. C. ..	1743 U Street.
Phillips, Marguerite, Ed.....	D. C. ..	1705 21st Street.
Pierce, James Francis, Eng.e.....	Mich. ..	1243 5th Street.
Pierce, Ulysses G. B., C.C.....	D. C. ..	1616 Riggs Place.
B.D., 1890, Hillsdale College.		
Pimper, Cora H., Ed.....	D. C. ..	1302 30th Street.
Pipes, Walter Logan, Eng.m.....	D. C. ..	916 F Street.
Plass, Joseph, C.C.....	Germany.	223 H Street.
Pole, Samuel B., C.C.....	D. C. ..	216 8th Street, N. E.
Poole, George, Eng.m.....	D. C. ..	903 E Street, S. E.

Name.	Legal residence.	City address.
Porter, Irwin, Arch.....	D. C. ..	3225 11th Street.
Potbury, Robert John, Eng.c.....	D. C. ..	1131 Euclid Street.
Potter, Charles Hollister, C.C.....	N. C. ..	316 East Capitol Street.
Powers, Edgar Cordell, C.C.....	D. C. ..	1327 Newton St., N. E.
Pratt, Mary B., Ed.....	Mass. ..	821 16th Street.
Prentiss, Augustin Michael, Eng.c..	S. C. ...	1402 L Street.
Prescott, Edward Chepmell, Eng....	D. C. ..	336 Md. Ave., N. E.
Prince, Ethel Thomas, Ed.....	D. C. ..	The Portner.
Purcell, Julia, Ed.....	N. Y. ..	1536 I Street.
Purcell, Tobias Edwin, Arch.....	N. Y. ..	Y. M. C. A.
Pyles, Hester Ellen, C.C.....	D. C. ..	13th & W Streets, S. E.
Ramsey, Harold Edwin, Eng.e.....	D. C. ..	813 Mass. Ave., N. E.
Rawlings, Julia May, Ed.....	D. C. ..	131 A Street, N. E.
Raymond, Maybelle, Ed.....	Pa.	1810 N Street.
Reamey, Brewster, C.C.....	D. C. ..	1746 N Street.
Reges, Maximilian F., Eng.c.....	Pa.	1113 5th Street.
Regester, Alberta Brown, C.C.....	Va.	Alexandria, Va.
Rhodes, Ada, C.C.....	Va.	Falls Church, Va.
Richard, Vernon Irving, C.C.....	D. C. ..	309 B Street, N. E.
Richards, Alice Mary, Ed.....	Eng. ...	1114 25th Street.
Richards, Chester Raymond, C.C....	Kans. ..	The Sherman.
Richards, Ruth B., Ed.....	D. C. ..	101 Massachusetts Ave.
Riley, Albert Austin, Eng.c.....	Ohio ...	2616 Connecticut Ave.
Rives, John Joseph, Ed.....	N. C. ..	316 9th Street, N. E.
Roberts, Norman, C.C.....	D. C. ..	707 22d Street.
M.D., 1897, University of Pennsylvania.		
Robinson, Rebecca Selina, Ed.....	Canada .	The Arlington.
Rodgers, Frank Beverly, Eng.e.....	D. C. ..	De Soto Apt. House.
Rogers, Frank Beecher, Eng.c.....	N. Y. ..	1342 Girard Street.
Rogers, Orville S., Arch.....	Ill.	1430 W Street.
Rose, Anna Lorette, C.C.....	D. C. ..	1725 Euclid Street.
Ross, Lily Aurelia, Ed.....	Ark. ...	1452 Belmont Street.
Rouzer, Horace Dodge, Eng.c.....	Md.	2517 14th Street.
Rowlett, Allen H., Arch.....	Va.	1530 9th Street.
Russell, Lewis H., Arch.....	N. Y. ..	3538 Warder Street.
Ryan, William David, Jr., C.C.....	Ill.	909 13th Street.
Safford, Howard Palmer, Eng.e....	D. C. ..	2445 Brightwood Ave.
Sammons, Margaret R., Ed.....	N. Y. ..	1604 K Street.
Sanders, Elsie, Ed.....	Germany.	1360 Kenyon Street.
Sargent, Rufus Harvey, C.C.....	D. C. ..	Geological Survey.
Satterlund, Hilda M., Ed.....	N. D. ..	1223 Vermont Ave.
Saum, Irving Randolph, Eng.c.....	D. C. ..	1308 Girard Street.
Saunders, Clara Rossman, Ed.....	Ohio ...	The Brunswick.

Name.	Legal residence.	City address.
Schaub, Gustav Adolphus, C.C.....	Texas ..	1419 Chapin Street.
Schatz, Elmer, C.C.....	D. C. ..	423 Massachusetts Ave.
Schladt, George J., Eng.e.....	D. C. ..	820 B Street, N. E.
Schmitt, Hugo Rudolf, Eng.e.....	D. C. ..	211 Florida Ave.
Schmitt, Waldo Lasalle, C.C.....	D. C. ..	211 Florida Ave.
Schnabel, Fred., Eng.....	Ill.	1521 I Street.
Schreiber, Ernst Otto, Jr., C.C.....	D. C. ..	642 E Street, N. E.
Schultz, Dorothy F. N., C.C.....	D. C. ..	The Plaza.
Scott, Jos. Addison Preston, Eng.c....	D. C. ..	504 8th Street, N. E.
Scott, Oliver Hazard Perry, Eng.e....	S. C. ..	3207 11th Street.
Sebree, Jessie Lydia, C.C.....	D. C. ..	Ammendale, Md.
Seltzer, Naomi Ruth, C.C.....	D. C. ..	941 Westminster Street.
Shackelford, Laura, C.C.....	D. C. ..	924 Md. Ave., N. E.
Shanks, Samuel Lee, Arch.....	D. C. ..	1422 35th Street.
Shannon, Lucile A., C.C.....	Nebr. ..	2215 14th Street.
Sherwood, Sidney Forsythe, C.C....	Va.	1515 O Street.
Shinnick, Harry Allison, C.C.....	D. C. ...	70 T Street.
Shipman, Mary P., Ed.....	D. C. ...	3064 Q Street.
Shoemaker, Maynard Parker, Eng....	Md.	1638 New Jersey Ave.
Shrader, James Houston, C.C.....	D. C. ..	804 9th Street.
Shuman, Mrs. Mary Barber, Ed.....	N. J. ...	1311 M Street.
Shuman, Royal Lewis, C.C.....	Pa.	1311 M Street.
Simpson, Gustavus Sailer, Eng.c....	D. C. ..	1477 Columbia Road.
Simpson, Walter Scott, Eng.c.....	D. C. ..	508 10th Street, S. E.
Singleton, Ina Duvall, C.C.....	D. C. ..	2020 H Street.
Sipe, Susan Bender, C.C.....	D. C. ..	The Ontario.
Sisco, Henry Nathaniel, C.C.....	D. C. ..	1344 Vermont Ave.
Skidmore, Elnathan J., C.C.....	Mich. ..	1514 K Street.
Skinner, Hosea Edwin, C.C.....	Ill.	1433 L Street.
B.S., 1904, Valparaiso College.		
Sloane, C. E., Eng.....	D. C. ..	1521 10th Street.
Small, Madison Ruff, Ed.....	D. C. ..	1466 Harvard Street.
Smallwood, Dorothy Archibald, C.C.D. C. ..		2107 S Street.
Smith, Chester Harvey, Eng.e.....	D. C. ..	327 2d Street, N. E.
Smith, Delos Hamilton, Arch.....	Ariz. ...	1905 F Street.
B.S. in Arch., 1906, The George Washington University.		
Smith, Everard Hall, Eng.c.....	D. C. ..	637 Mass. Ave., N. E.
Smith, Emma Miriam, Ed.....	Md.	800 E Street, N. E.
Smith, Ethel Marion, C.C.....	Ill.	1833 V Street.
Smith, Frank Newman, C.C.....	D. C. ..	The Ontario.
Smith, Harry Locke, Eng.c.....	N. H. ..	313 S Street, N. E.
Smith, Hoxsie Yost, Eng.e.....	D. C. ..	1619 17th Street.

Name.	Legal residence.	City address.
Smith, Mary Louise, C.C.....	D. C. ..	The Madrid.
Smith, Janie Alice, C.C.....	D. C. ..	637 Mass. Ave., N. E.
Snelling, Henry Hornor, Eng.m....	Va.	3522 10th Street.
Spalthoff, Wm. Dornedden, Eng.e....	N. Y. ..	1916 H Street.
Springer, Jessie F., C.C.....	Ind.	The Dewey Hotel.
Stabler, Harold Brooke, Eng.e.....	Md.	1214 I Street.
Stafford, Charles F., Eng.m.....	N. Y. ..	1515 O Street.
Starr, Relda A., C.C.....	N. Y. ..	111 4th Street, S. E.
Staulil, Edgar J., Eng.c.....	N. D. ..	1010 N Street.
Stearns, Orlo Foster, C.C.....	Mass. ..	1115 K Street.
Steever, Laura Winfield, C.C.....	D. C. ..	Forest Service.
Stewart, Barton Shriver, Arch.....	D. C. ..	Y. M. C. A.
Stewart, Donald Holt, Eng.....	Md.	R. F. D. No. 3, Silver Springs, Md.
Stewart, Elmer, C.C.....	D. C. ..	1644 Newton Street.
Stinemetz, Morgan, Ed.....	D. C. ..	1446 Irving Street.
Stout, Joseph Duerson, C.C.....	D. C. ..	1529 8th Street.
Streamer, Louis Milton, Eng.....	D. C. ..	746 12th Street, S. E.
Stromberger, Alice P., Ed.....	D. C. ..	1325 Mass. Ave., S. E.
Stutler, Ward, Arch.....	W. Va. ..	1736 G Street.
Stuwe, John Daniel, Eng.c.....	Minn. ..	1017 P Street.
Sullivan, Anna Ermingarde, Ed....	Iowa ...	448 P Street.
Summy, Helen, C.C.....	D. C. ..	920 19th Street.
Summy, Katherine Strong, C.C....	D. C. ..	920 19th Street.
Taylor, Irving Paul, C.C.....	D. C. ..	1433 Belmont Street.
Taylor, James Norman, C.C.....	Del.	1400 L Street.
Taylor, Margaret Randolph, C.C....	D. C. ..	1330 U Street.
Taylor, Page, Ed.....	D. C. ..	The Exeter.
Thatcher, Arthur S., C.C.....	Pa.	Bureau of Chemistry.
Thomas, William J. Denziloe, C.C....	D. C. ..	1530 29th Street.
Thompson, Frank Meredith, C.C....	D. C. ..	Langdon, D. C.
Thompson, Herbert H., Eng.m.....	Ohio ...	904 Mass. Ave., N. E.
Thompson, Walter H., Eng.e.....	Pa.	1444 Rhode Island Ave.
Thomson, Anna Speck, C.C.....	Ky.	2701 14th Street.
Thomson, Harriet Huntington, C.C....	Md.	Silver Spring, Md.
Thorne, Harold Carrier, Eng.e.....	Minn. ..	The Victoria, Apt. 2.
Thrall, Walter H., Eng.....	Vt.	1910 15th Street.
Thrall, William Gove, Eng.c.....	Vt.	1910 15th Street.
Todd, Cecilia, Ed.....	D. C. ..	1243 Irving Street.
Tolson, Lillian Irene, Ed.....	Md.	125 12th Street, N. E.
Tong, William Suwar, Eng.c.....	China ..	1821 Cedar Street.
Town, Edith H., C.C.....	Va.	1415 Chapin Street.
Tracy, Ethel Wynne, Ed.....	D. C. ..	The Willson.

Name.	Legal residence.	City address.
Truesdell, Stephen Riggs, Eng.c....	D. C. ..1121	Harvard Street.
Tucker, Prescott Stearns, C.C.....	D. C. ..633	G Street, N. E.
Tulloss, Joseph Clark, Eng.m.....	Va. ....1110	F Street.
Tunstall, Florence Marie, C.C.....	D. C. ..1302	L Street.
Turnburke, Vernon Palmer, Eng.e....	D. C. ..403	P Street.
Udy, Stanley Hart, C.C.....	N. Y. ..	Dept. of State.
Underwood, Harriet, Ed.....	N. Y. ..3223	N Street.
Underwood, M. L., Ed.....	D. C. ..129	6th Street, N. E.
Van Alstyne, Harry Kendall, C.C....	N. Y. ..	The Bachelor.
Vance, Georgie E., C.C.....	D. C. ..430	M Street.
Vandegrift, John Leslie, Eng.....	D. C. ..209	H Street.
Vanden Bossche, Henry P., Eng.c..	Mass. ..326	16th Street, S. E.
Van Kirk, Lloyd Howard, Eng.....	Pa. ....1839	16th Street.
Van Vleck, William Cabell, Ed.....	D. C. ..800	E Street, N. E.
Veihmeyer, Frank, Eng.c.....	D. C. ..438	10th Street, S. W.
von Ezdorf, Robert, Jr., Arch.....	Pa. ....731	Girard Street.
Vorkoeper, John, C.C.....	D. C. ..1433	New Jersey Ave.
Wadsworth, Marth Blow, Ed.....	D. C. ..1801	Massachusetts Ave.
Waggaman, Clarke, Arch.....	D. C. ..2600	Connecticut Ave.
Wagner, S. Peter, Arch.....	Md.	Rockville, Md.
Walker, Alberta, Ed.....	D. C. ..1634	S Street.
Walker, Bertha F., Ed.....	D. C. ..420	B Street, N. E.
Walter, Wallace Wilson, C.C.....	Pa. ....3317	R Street.
Walton, George Pelham, C.C.....	D. C. ..	Langdon, D. C.
Wandelaer, Isabel de, Arch.....	D. C. ..1409	Newton Street.
Ward, Philip Henry, Jr., Eng.e....	D. C. ..1756	Pennsylvania Ave.
Washburn, Martha, Ed.....	Mass. ..	Nat'l Cathedral School.
Waters, Joseph Henry, Eng.c.....	D. C. ..3227	11th Street.
Waters, Suzanne Beatrice, Ed.....	Wis. ....3009	11th Street.
Watts, Mary Jane, Ed.....	D. C. ..1206	Columbia Road.
Weller, Ethel Marguerite, C.C.....	D. C. ..753	8th Street, S. E.
Wenderoth, Ernest Ferdinand, Eng.e.	N. Y. ..	Bureau of Standards.
Wenz, Edward Lucas, Arch.....	Ohio ...1113	L Street.
White, Marian, Ed.....	Iowa ...1430	W Street.
White, Mary Josephine, Ed.....	Ohio ...	National Park Seminary, Forest Glen, Md.
White, Mabel Louise, C.C.....	Miss. ..	Treasury Department.
White, Sarah Eskridge, Ed.....	D. C. ..213	C Street, S. E.
Whitley, Isabel Alice, C.C.....	Ill. ....1150	N. Capitol Street.
Wiegand, Henry Frank, Eng.e....	D. C. ..824	6th Street, S. W.
Wild, Alfred E., Jr., Eng.....	D. C. ..12	10th Street, N. E.
Wilgus, Blanche, C.C.....	D. C. ..1848	3d Street.
Will, Ernest McKeige, Arch.....	Fla. ....47	S Street.

Name.	Legal residence.	City address.
Willard, Clayton Edwin, C.C.....	D. C. ..	39½ Bates Street.
Williams, Charles Wesley, Eng.....	Pa.	232 P Street.
Williams, Pascoe W., C.C.....	Va.	Treasury Department.
Willis, Eppa Hunton, Arch.....	D. C. ..	635 9th Street, N. E.
Wills, R. Mayo, Eng.....	Va.	603 H Street.
Willson, Charles C., Eng.m.....	D. C. ..	57 R Street, N. E.
Wilson, David Edward, Ed.....	D. C. ..	1012 Park Road.
Wilson, John Joseph, Arch.....	Conn. ..	1408 V Street.
Wilson, Ruth, C.C.....	D. C. ..	214 P Street.
Winlock, Peyton, Arch.....	D. C. ..	1012 22d Street.
Winter, Max W., Eng.c.....	Nebr. ..	1448 Clifton Street.
Wise, Clarence Edward, C.C.....	Ind.	Silver Spring, Md.
Wiseman, Edward Wallace, Eng....	Mo.	3629 11th Street.
Witten, Aubrey B., Arch.....	D. C. ..	2518 13th Street.
Woodward, Esther, Ed.....	D. C. ..	125 New York Ave.
Woodwell, Carolus Sylvester, C.C... Fla.		930 16th Street.
Workman, Robert DuBois, C.C.....	Pa.	Marine Barracks.
Wrightson, James Owens, C.C.....	D. C. ..	812 20th Street.
Wyeth, John Churchill, Eng.e.....	Ariz. ...	The Cordova.
Yang, Sui Chi, Eng.c.....	China ..	Chinese Legation.
Ying, T. W., Eng.....	China ..	813 12th Street.
Yoder, Bertha Alice, Ed.....	Kans. ..	144 11th Street, S. E.
Yoder, Bessie Lee, Ed.....	Kans. ..	144 11th Street, S. E.
Young, Floyd D., C.C.....	Ore.	1446 N Street.
Young, Irene Ottilie, C.C.....	Iowa ...	2210 Pennsylvania Ave.

Summary.

GRADUATE STUDENTS:

Students in attendance.....	14
Candidates for the D.C.L. degree.....	2
Candidates for the C.E. degree.....	3
Candidates for the E.E. degree.....	4
Candidates for the M.S. degree.....	9
Candidates for the M.A. degree.....	30
Candidates for the Jur.D. degree.....	1
Candidates for the Ph.D. degree.....	51

— 114

UNDERGRADUATE STUDENTS:

Columbian College:

Candidates for the B.A. degree.....	136
Candidates for the B.S. degree.....	14
Candidates for the B.S. in Chem. degree.....	26
Special	123

— 299

Washington College of Engineering:

Candidates for the B.S. in C.E. degree.....	63
Candidates for the B.S. in E.E. degree.....	46
Candidates for the B.S. in M.E. degree.....	29
Special	53
	<hr/> 191

Division of Architecture:

Candidates for the B.S. in Arch. degree.....	14
Special	42
	<hr/> 56

Division of Education:

Candidates for the B.A. degree.....	55
Special (including Arts and Crafts).....	91
	<hr/> 146

Total	806
-------------	-----

COLLEGE OF THE POLITICAL SCIENCES.

Name.	Legal residence.	City address.
Allen, John Clarence.....	D. C.	1756 Church Street.
Altizer, Posey J.....	Ky.	1104 12th Street.
LL.B., 1908, The George Washington University.		
Anderson, Edward, Jr.....	Md.	803 12th Street.
Atkinson, Charles Raymond.....	Wyo.	1119 K Street.
Bayard, Philip	Del.	4 Iowa Circle.
Bendz, Waldman R.....	Md.	Beltsville, Md.
Bowen, Leonard	Va.	1025 22d Street.
Bowen, Norris	Va.	1025 22d Street.
Bryan, Albert W.....	Md.	Y. M. C. A. Bldg.
Bunch, Tillman	S. C.	727 13th Street.
Burch, George O.....	D. C.	1724 Newton Street.
Campbell, Robert Stuart.....	D. C.	3019 24th Street, N. E.
Carlson, Oscar H. W.....	Pa.	62 Rhode Island Ave.
Carmody, John D.....	Md.	1213 Vermont Ave.
A.B., 1893, Gonzaga College.		
Carroll, Louis W.....	D. C.	130, The Portner.
Carstairs, Charles Haseltine.....	Pa.	1737 N Street.
Clark, Frederic N.....	Mich.	3601 13th Street.
B.S., 1889, Michigan State Agricultural College.		
Costa, Alberto Palacios.....	Arg. Rep...	The Benedick.
Creecy, Donald Brooke.....	D. C.	2150 P Street.
dei Medici, Gino V. S.....	Italy	1728 Columbia Road.
Dodd, Philip Lindsley.....	N. J.	824 Connecticut Ave.

Name.	Legal residence.	City address.
Domeratzky, Louis	Russia	1335 F Street.
Eldridge, Chester W.....	Mass.	1217 Harvard Street.
Fleming, Robert V.....	D. C.	1408 Massachusetts Ave.
Forbes, Daniel R.....	D. C.	1211 Girard Street.
Fort, J. Carter.....	D. C.	1613 30th Street.
Frost, Wesley	Ky.	1117 17th Street.
A.B., 1907, Oberlin College.		
Glessner, John A.....	Pa.	206 10th Street, N. E.
Greene, Bertram William B.....	D. C.	1829 Jefferson Place.
B.S., 1902, Massachusetts Institute of Technology.		
Hall, Francis Cadwalader.....	D. C.	Bu. of Statistics, Com. & Labor.
Hamm, Theodore Cushing.....	Calif.	Union Building.
Hardie, W. Vincent.....	Okla.	Interstate Commerce Commission.
Hart, Harry L.....	Kans.	919 20th Street.
Hayward, Afton Smith.....	Mass.	1136 25th Street.
B.S., 1906, Amherst College.		
Henry, Philip S.....	N. C.	1239 Vermont Ave.
A.B., London University.		
Holder, Charles Adams.....	Colo.	Hotel Normandie.
Hunt, John Stuart.....	Texas	1717 Euclid Street.
Ilustre, Eustacio C.....	P. I.	726 12th Street.
LL.B., 1908, The George Washington University.		
Jaeger, Oscar Ralph.....	Iowa	823 19th Street.
Kent, Otis Veall.....	Texas	The Carolina.
LL.B., 1907, LL.M., 1908, Georgetown University.		
Kimber, Emmor Harper.....	N. Y.	1311 K Street.
Laing, James Oliver.....	Mo.	Hotel Gordon.
Lamason, Orville B.....	N. J.	1708 P Street.
Lane, C. E.....	D. C.	1708 P Street.
Larzelere, Charles LaVerne.....	Mich.	1538 17th Street.
Levin, Michael	Wisc.	Light House Board.
Lewis, Leon Lawrence.....	Wisc.	The Iroquois.
McKenna, Coe Aloysius.....	Ore.	1413 V Street.
McLaughlin, F. M.....	Iowa	217 East Capitol Street.
Mapa, Emilio	P. I.	813 12th Street.
Martin, William M.....	Va.	1408 H Street.
Merritt, Eugene	D. C.	1778 Willard Street.
A.B., 1903, Cornell University.		
Merritt, Leonard A.....	Minn.	154 F Street, S. E.
LL.B., 1904, LL.M., 1905, The George Washington University.		

Name.	Legal residence.	City address.
Messer, Mary Burt.....	D. C.	Washington College, 3d and T St., N. E.
Neighbors, H. Fletcher.....	N. Y.	1760 Church Street.
Newcomb, Harold W.....	Mass.	Y. M. C. A.
Pearson, Edmund Lester.....	Mass.	1729 H Street.
A.B., 1902, Harvard University.		
B.L.S., 1904, University of New York.		
Randolph, Vivien Peyton.....	Miss.	1105 17th Street.
A.B., 1908, Randolph-Macon College.		
Redwood, Charles Cannon.....	Texas	1122 Vermont Ave.
LL.M., 1908, National University. *		
Rogers, Silas Wesley.....	Ark.	1831 G Street.
LL.B., 1906, University of Arkansas.		
Rohrer, Joseph R.....	Ohio	1105 K Street.
Schuette, Oswald F.....	Ill.	1745 K Street.
Shuck, Walter L.....	Md.	Dept. of Agriculture.
Sidell, William E.....	N. J.	1317 Q Street.
Smith, Arthur Donaldson.....	N. C.	Hotel Grafton.
A.B., 1885, M.D., 1889, University of Pennsylvania.		
Smithers, George F.....	Del.	1337 L Street.
Sommers, Walter Allwood.....	N. Y.	657 F Street, N. E.
LL.B., 1906, LL.M., 1907, The George Washington University.		
Stambaugh, George Bingham....	D. C.	3833 14th Street.
Stephenson, Lowry Boyd.....	D. C.	1727 Riggs Place.
Stubblefield, Simon Peter.....	Miss.	2024 G Street.
B.S., 1908, University of Mississippi.		
Thatcher, Charlie E.....	Neb.	928 B Street, N. E.
Thomas, Sidney Taylor, Jr.....	D. C.	1726 20th Street.
Thomson, Alfred Ray.....	Md.	Silver Spring, Md.
Tyacke, Margaret	Mass.	1326 Park Road.
Vonnegut, Arthur	Ind.	1028 17th Street.
A.B., 1906, Cornell University.		
Waters, William Clark.....	D. C.	716 14th Street.
Wiest, Edward S.....	Pa.	1433 Massachusetts Ave.
Willet, Albert W.....	D. C.	2519 Connecticut Ave.
Wilson, Lee R.....	D. C.	16th & Lawrence Sts., N. E.
Wilson, William Ewing.....	D. C.	761 Girard Street.
Winship, North	Ga.	East Falls Church, Va.
Woodmansee, Arthur	Ohio	2011 G Street.
Woolsey, Lester Hood	N. Y.	1404 Park Road.
A.B., 1901, Harvard University.		
LL.B., 1908, The George Washington University.		

Name.	Legal residence.	City address.
Worthington, A. Saunders.....	Ohio	3009 Q Street.
Yaeger, William Leonard, Jr.....	D. C.	Int. Bldg. Corp'n.
Yen, Weiching Williams.....	China	2001 19th Street.
B.A., 1897, University of Virginia.		
Litt.D., Emperor of China.		
Zapf, Lacey C.....	Tenn.	1311 K Street.
A.B., 1906, De Pauw University.		
Zapf, Louis R.....	Tenn.	1311 K Street.
A.B., 1906, De Pauw University.		
Zapoleon, Louis B.....	Ohio	515 13th Street.

Summary.

Candidates for A.B. degree.....	9
Candidates for M.Dip. degree.....	11
Special	69

PROFESSIONAL DEPARTMENTS.

DEPARTMENT OF LAW.

Bachelor of Laws.

First Year.

Name.	Legal residence.	City address.
Baer, David Alphonse.....	D. C.	3044 N Street.
Baldwin, Edward Damon.....	Ore.	1736 G Street.
B.Lit., 1906, Whitman College.		
Beneman, George	Md.	1336 7th Street.
Berger, Charles Pratt.....	Mich.	1313 Columbia Road.
Berry, James William.....	D. C.	14 3d Street, S. E.
Bloomer, George Beale.....	D. C.	1410 G Street.
Callister, Edward Richard.....	Utah	1333 R Street.
Carpenter, Newton Ford.....	D. C.	Apt. 62, The Wyoming.
Catlin, Henry William.....	Colo.	910 23d Street.
Chilcott, Ralph Waldo.....	Va.	Fairfax, Va.
B.S., 1908, South Dakota State College.		
Corrigan, John, Jr.....	Ga.	The Farragut.
Curl, Joseph Ryland.....	D. C.	2312 I Street.
Dodge, Parker Van Patten.....	D. C.	134 B Street, N. E.
S.B., 1907, Massachusetts Institute of Technology.		
DuBois, Henry Pastor.....	Pa.	1421 Chapin Street.
M.E., 1907, Cornell University.		
Foo, Hsen Shuen.....	China	Apt. 22, The Madrid.
A.B., 1906, The Ching Chong School.		
Gerhardt, Louis Webster.....	Pa.	4 B Street, N. E.
Geyer, Berkeley Willard.....	D. C.	1923 S Street.
C.E., 1907, Princeton University.		
Gross, LeRoy Coates.....	N. J.	718 21st Street.
Hutchins, William Ambrose.....	Ohio	1217 Harvard Street.
Hutchinson, Frederick Porter....	Kans.	1119 17th Street.
Johnston, Horace Stuart.....	D. C.	122 F Street, S. E.
Knox, Hugh Smith.....	Pa.	1527 K Street.
B.A., 1907, Yale University.		
Lamas y Almansa, Dionisio.....	Cuba	1414 N Street.
Lambeck, Arthur Hugo.....	Wisc.	Apt. 34, The Ventosa.
B.A., 1907, University of Wisconsin.		
Leavitt, Ezekiel	D. C.	1201 N. Capitol Street.
Odessa Gymnasium, Russia.		
Lloyd, Thomas Leslie.....	Mo.	The Olympia.

Name.	Legal residence.	City address.
Marye, Tench Tilghman.....	D. C.	1526 29th Street.
Mather, James	Eng.	711 5th Street, N. E.
Moore, Richard Gray.....	Mass.	
Nicholson, Soterios	Greece	1801 G Street.
Phillips, Henry Jeter.....	Va.	Geo. Washington Hotel.
Place, Ernest Frederic Alan.....	N. Y.	House of Rep.
Schoenfeld, Hans Fred. Arthur...	N. J.	3448 34th Place, Cleve- land Park, D. C.
B.A., 1907, The George Washington University.		
Taylor, Bright Hopkins.....	Mo.	Rockville, Md.
Tilton, Rufus Harold.....	Mass.	220 2d Street, N. E.
Ph.B., 1908, Wesleyan University.		
Towles, Henry Orme.....	D. C.	1124 12th Street.
Treat, Howard Alton.....	Minn.	Y. M. C. A.
Whitestone, Isadore David.....	Pa.	House of Rep. Office Bldg.
A.B., 1908, Yale University.		
Wood, William Morton.....	Minn.	House of Rep. Office Bldg.

Second Year.

Adams, William Waugh.....	N. Y.	1423 S Street.
Agee, John Hercules.....	Nebr.	1736 G Street.
Allee, James Frank, Jr.....	Del.	516 13th Street.
Black, Charles Frederick.....	Vt.	1404 15th Street.
Ph.B., 1907, University of Vermont.		
Blount, Walter Eames.....	D. C.	3101 R Street.
Brantley, William Gordon, Jr....	Ga.	2024 G Street.
A.B., 1907, University of Georgia.		
Campbell, Philip Barrand.....	D. C.	1977 Biltmore Street.
Dodson, James Dunbar.....	D. C.	1714 F Street.
Dutton, Clarence Benjamin.....	Mass.	1412 15th Street.
Everett, Frank Orear.....	Mo.	916 14th Street.
Faulkner, William Ernest.....	Ky.	455 G Street.
B.A., 1907, Union College.		
Ford, Frank Farnsworth.....	Mich.	1931 K Street.
Gates, Edward Percy.....	D. C.	3506 Center Street.
B.A., 1908, The George Washington University.		
Graff, William Archibald.....	Va.	114 E Street.
Hellen, Arthur	D. C.	1731 20th Street.
Holcombe, Amasa Maynard.....	Mass.	1829 Corcoran Street.
B.S., 1904, Massachusetts Institute of Technology.		

Name.	Legal residence.	City address.
Hubbard, Lyle	Iowa	1700 15th Street.
Hunter, Clyde Elliott.....	Md.	Y. M. C. A.
Hupper, Roscoe Henderson.....	Me.	812 East Capitol Street.
A.B., 1907, Bowdoin College.		
Kitselman, Harry Louis.....	Ind.	406 The Burlington.
Lambert, Chester Cromer.....	D. C.	2127 15th Street.
LeDuc, Louis Bronson.....	D. C.	1403 21st Street.
Mackenzie, Robert Lundie.....	Ore.	1011 H Street.
MacPhail, Leland Stanford.....	Mich.	Apt. 14, The Columbia.
McClenon, Walter Holbrook....	S. D.	1106 P Street.
A.B., 1907, Iowa College.		
Moore, Josiah Arthur.....	Ill.	1404 Massachusetts Ave.
B.S., Millikin University.		
Oberlin, John Jay.....	Md.	Patent Office.
A.B., 1901, Washington and Lee University.		
Parker, Francis Joseph.....	S. D.	4 B Street N. E.
Pease, Ferdinand Henry.....	Vt.	1404 15th Street.
B.A., 1907, University of Vermont.		
Schultz, Detlef Henry.....	Ind.	26 Iowa Circle.
Simmons, Berkeley Leo.....	D. C.	1421 Belmont Street.
Simmons, William Wyatt.....	Miss.	1105 K Street.
B.A., 1905, Mississippi College.		
Sincerbeaux, Chauncey Milton...	N. Y.	1920 I Street.
A.B., 1905, Yale University.		
Singleton, Ogle Ridout.....	D. C.	2020 H Street.
B.A., 1908, The George Washington University.		
Smith, Thomas William.....	Idaho	Y. M. C. A.
Smith, William Henry.....	Mont.	714 18th Street.
Smithers, Nathaniel Barratt.....	Del.	518 13th Street.
Smoot, John Daniel Kurtz.....	Va.	Langley, Va.
Spencer, Thomas Peachy.....	Va.	The Iroquois.
A.B., 1905, William and Mary College.		
Swift, John Tuttle.....	Mass.	26 Iowa Circle.
Taylor, Kenneth	Minn.	1433 Belmont Street.
B.S., 1907, Carleton College.		
Van Vleck, William Cabell.....	D. C.	800 E Street, N. E.
B.A., 1908, The George Washington University.		
Wilmer, Edward George.....	Wisc.	308 F Street.
Wyatt, Hardee	N. Mex. ...	811 13th Street.
B.A., B.S., L.I., 1900, University of Nashville.		
Zirkle, Joseph Claiborne.....	Va.	837 Shepherd Street.

Third Year.

Name.	Legal residence.	City address.
Adams, Thomas Berton.....	Fla.	912 H Street. B.A., 1902, University of Nashville.
Aldrich, Charles Roberts.....	Ill.	The Benedick. B.A., 1903, Yale University.
Allen, Charles Louis.....	S. D.	1700 15th Street.
Ambrose, George Lewis.....	Mont.	1333 R Street.
Arlitt, John Louis.....	Texas	2024 G Street.
Banning, Archibald Tanner, Jr....	N. Y.	1445 Massachusetts Ave. A.B., 1904, Cornell University.
Barndollar, Burton Hack.....	Pa.	3510 N. H. Ave.
Barr, James	Wisc.	2024 G Street.
Barrick, Henry Llewellyn.....	Neb.	The Plymouth.
Bigoness, Octave Adelbert.....	D. C.	Little Falls Road, D. C.
Birney, William McDonald.....	D. C.	1516 22d Street.
Biscoe, John Edward	D. C.	The Farragut. Grad. Engr., 1904, Virginia Military Institute.
Briggs, Benjamin Franklin.....	Me.	26 Iowa Circle.
Brüninga, John Hermann.....	Ill.	Patent Office.
Cable, John Levi.....	Ohio	1700 15th Street. L.B., 1906, Kenyon College.
Carpenter, Walter Clayton.....	R. I.	The Mendota. Ph.B., 1906, Brown University.
Caywood, Charles Chester.....	D. C.	1629 Newton Street.
Childs, Frederick Willard.....	Vt.	The Champlain.
Clark, Chester Morrow.....	D. C.	Florence Court. A.B., 1907, Harvard University.
Cragin, Harry Seymour.....	D. C.	1013 L Street.
Dallwig, Paul	Wisc.	903 13th Street.
Dallzell, Robert Duff.....	Pa.	1605 N. H. Ave. A.B., 1905, Yale University.
Davenport, Lewis Howard.....	N. Y.	2624 University Place.
DeLancy, Roi	Ohio	1226 11th Street. B.A., 1908, The George Washington University.
Edgerton, Frank Eugene.....	Neb.	115 4th Street, S. E. A.B., 1900, University of Nebraska.
Finney, Harry Whiting.....	D. C.	2204 Q Street.
Fravel, F. Russell.....	Mass.	1016 15th Street.
Garrett, Clyde Davis.....	D. C.	945 O Street.
Glennan, Arthur Wyman.....	D. C.	Columbian Building.
Gonzalez, Antonio Cornelius, Jr....	N. Y.	1417 K Street.
Graves, Pleasant Fowler.....	Texas	26 Iowa Circle. Ph.B., 1905, Southwestern University.

Name.	Legal residence.	City address.
Haines, Milton	Ohio	U. S. Capitol.
B.S., 1898, Ohio Northern University.		
Haselton, George Irving.....	N. H.	1002 N Street.
Hemmick, Frank Schley.....	D. C.	1700 15th Street.
Horner, Errol Osman.....	N. J.	1700 15th Street.
Hutchins, Wells Aleck.....	D. C.	1401 Massachusetts Ave.
Jenkins, Warren Maxwell.....	Pa.	26 Iowa Circle.
A.B., 1906, Grove City College.		
Jensen, John	Utah	1333 R Street.
B.A., 1906, University of Utah.		
Kelly, Jerome Elmer.....	S. D.	Senate Post Office.
Kester, Bruce Randall.....	Pa.	The Brunswick.
Koons, George Hickman.....	Ind.	26 Iowa Circle.
Lawburgh, Robert Lee.....	Ind.	1714 15th Street.
A.M., 1905, De Pauw University.		
Leach, Harry Earl.....	Calif.	The Burlington.
Lohm, Albert Lafayette.....	W. Va.	House of Rep.
Micou, Richard Dunnica.....	Va.	Home Life Bldg.
B.A., 1903, M.A., 1903, University of Virginia.		
Miller, Walter Karl.....	Kans.	33 B Street.
Nyemaster, Jesse Ray.....	Iowa	312 Md. Ave., N. E.
Phair, Philip DeWitt.....	Me.	131 A Street, N. E.
M.A., 1906, Harvard University.		
Pillow, Gideon Johnston.....	La.	1464 Clifton Street.
Riddleberger, Harrison Heath...	Va.	U. S. Senate.
Roche, Sidney	D. C.	1325 1st Street, S. W.
Smith, Dyer	Pa.	East Orange, N. J.
M.E., 1903, Lehigh University.		
Smith, George Thomas.....	Md.	3635 11th Street.
Stuart, Paul Allison.....	Pa.	26 Iowa Circle.
A.M., 1906, Washington and Jefferson College.		
Sullivan, Horace Moore.....	Tenn.	230 N. Capitol Street.
Thomas, Bert Carl.....	Ohio	1615 Florida Ave.
Tyrer, Arthur James.....	Wash.	The Albemarle.
Ulke, Titus	D. C.	411 15th Street.
E.M., 1889, Royal Academy of Mines, Freiberg, Saxony.		
Wagner, Harold J.....	N. Y.	State Department.
Wallace, Alfred, Jr.....	S. C.	614 M Street.
LL.B., 1908, University of South Carolina.		
Whiting, Roscoe Everett.....	Wash.	Stratford Hotel.
A.B., 1901, Bowdoin College.		

Bachelor of Law.**First Year.**

Name.	Legal residence.	City address.
Andersen, Charles	Texas	216 N. Capitol Street.
Bean, George Tinny.....	D. C.	Patent Office.
Boughton, Solon James	Ohio	2024 G Street.
Brookes, John St. Clair, Jr.....	D. C.	1525 Corcoran Street.
A.B., 1907, The George Washington University.		
Burns, Walter William.....	N. Y.	1321 Q Street.
M.E., 1906, Cornell University.		
Byrd, Harry Clifton.....	Md.	1204 K Street.
B.S. in C.E., Maryland Agricultural College.		
Byrn, Edward Wright, Jr.....	Md.	627 F Street.
Carpenter, John Condict.....	D. C.	1318 Vermont Ave.
M.E., 1908, Cornell University.		
Chapman, Henry Hendley.....	D. C.	913 New York Ave.
Clark, Horace Fletcher, Jr.....	D. C.	1460 Harvard Street.
Councilor, James Allan.....	Iowa	2012 1st Street.
Cox, Henry Aubrey.....	Tenn.	711 Mt. Vernon Place.
Davis, Warren Jefferson.....	Va.	Apt. 129, The Cairo.
B.A., 1903, Eastern College.		
Dean, Franklin Augustus, Jr.....	Pa.	The Mendota.
A.B., 1907, Yale University.		
Disque, William Alfred.....	Ky.	Y. M. C. A.
Egner, Daniel Webster.....	Md.	War Department.
Eickhoff, Theodore Henry.....	Ind.	1522 16th Street.
B.S. in E.E., 1908, Purdue University.		
Fauntleroy, John Smith Young...	La.	House of Rep.
A.B., 1905, Louisiana State University.		
Fischer, Stanley Herman.....	D. C.	1515 T Street.
Fraser, William Wright.....	Md.	1414 15th Street.
A.B., 1905, New Windsor College.		
French, Francis Raymond.....	D. C.	The California.
Geiman, Daniel J.....	Va.	1404 M Street.
Gerhart, Herbert Benjamin.....	Pa.	1845 Calvert Street.
Gill, Walter Josiah, Jr.....	Mass.	Patent Office.
S.B., 1904, Massachusetts Institute of Technology.		
Glazer, Jacob Bennett.....	N. Y.	603 H Street.
Goode, Philip Burwell.....	D. C.	Patent Office.
A.B., 1907, Harvard University.		
Gray, Jay Lyman.....	Me.	812 East Capitol Street.
A.B., 1908, Bowdoin College.		
Griffin, John Calvin.....	N. Y.	The Naples.
Ph.B., 1908, Syracuse University.		

Name.	Legal residence.	City address.
Hart, Wayne Maris.....	D. C.	1536 6th Street.
Herriott, David Paul.....	Pa.	1700 15th Street.
A.B., 1905, Washington and Jefferson College.		
Hilton, Charles Vanderbilt.....	Md.	3264 N Street.
Howes, John William.....	Mass.	930 F Street.
Hynson, Richard Washburn.....	D. C.	1335 N Street.
Kemper, Edward Crawford.....	D. C.	1512 Park Road.
Kause, Arthur John.....	D. C.	1905 Jackson St., N. E.
Lamb, Orrin Vestal.....	S. D.	1000 M Street.
Lilly, Scott Henry.....	Iowa	4122 7th Street.
B.A., 1897, Cornell College.		
Littlefield, John Cottle.....	Utah	1312 12th Street.
Long, Franklin Samuel.....	D. C.	2206 Flagler Place.
Manning, George Madison A....	Ky.	1304 13th Street.
Mechlin, Ernest Frederick.....	D. C.	3020 Cambridge Place.
B.S., 1907, The George Washington University.		
Meyer, Harry Edwin.....	Ohio	2616 Connecticut Ave.
Miller, Herman	Neb.	Patent Office.
B.S., 1898, Nebraska Wesleyan University.		
Moyer, Samuel	Pa.	323 W Street, N. E.
Mueller, Edward Louis.....	D. C.	803 8th Street.
Myers, John Dashiell.....	D. C.	The Vermont.
Neal, Franklin Gilman.....	Mass.	1623 Park Road.
Ph.B., 1908, Yale University.		
Owen, Richard Blakelock.....	D. C.	1715 Kilbourne Place.
Palais, Maurice	Mass.	206 Indiana Ave.
Perry, Jesse Greene.....	Ga.	227 New Jersey Ave.
Phelps, Claude Bascombe.....	Ala.	1113 O Street.
Preston, J. Stanley.....	N. Y.	1736 G Street.
Reavis, Andrew Bryant.....	Tenn.	3555 11th Street.
Rich, Samuel Grover.....	Idaho	
B.S. in Chemistry, Agricultural College of Utah.		
Roadstrum, Victor Nelson.....	Ill.	1435 K Street.
Robinette, Howard Augustine....	D. C.	15 3d Street.
Rowland, Guy Edwin.....	Texas	1519 Rhode Island Ave.
Rush, Clifford Alvin.....	Kans.	938 K Street.
Sheridan, Thomas Harold.....	N. H.	Y. M. C. A.
Smith, Charles Watson.....	Pa.	1111 M Street.
Smith, Jesse Bond.....	D. C.	Takoma Park, D. C.
Somerville, Robert Nugent.....	Miss.	345 House of Rep.
A.B., 1907, University of Mississippi.		
Stebbins, George Edwin.....	Mass.	Patent Office.
A.B., 1903, Bates College.		
Ph.D., 1907, Clark University.		

Name.	Legal residence.	City address.
Stinchfield, Ray Lewis.....	Mass.	Y. M. C. A. B.S., Worcester Polytechnic Institute.
Stockslager, William Morse.....	Idaho	Y. M. C. A. A.B., 1907, Valparaiso University.
Stratton, David Vincent.....	Ore.	
Thorp, Clarendon Herbert.....	Ohio	419 6th Street.
Walker, John Earl.....	Mich.	1119 17th Street. B.S., 1907, Kalamazoo College. B.S., 1907, Chicago University.
Wann, Eugene Charles.....	D. C.	144 F Street, S. E.
West, Martin Raymond.....	D. C.	138 11th Street, S. E.
Wilson, Charles Shafer.....	D. C.	108 G Street.
Windsor, Lemuel Henry.....	D. C.	145 E Street, S. E.

Second Year.

Bradley, Paul Earl.....	Ill.	2451 18th Street.
Brisbine, Dawes Ellsworth.....	S. D.	U. S. Senate Post Office.
Brohough, Oscar C.....	Minn.	819 5th Street. B.A., 1903, University of Minnesota.
Calder, Albert Russell.....	Pa.	917 N. C. Ave., S. E.
Crafts, Frederick Albert.....	Mass.	206 Pa. Ave., S. E.
Dahn, Franz Frederick Wm.....	Iowa	1515 O Street.
Garrett, George Everett.....	Va.	101 8th Street, S. E.
Grover, William Robinson.....	Mich.	1205 N Street. Ph.B., 1907, Kalamazoo College.
Guasp, Ignacio	Porto Rico.	2024 G Street.
Hill, Herman Henry.....	N. H.	60 M Street. A.B., 1907, Dartmouth College.
McCray, Claud Henry.....	N. Y.	G. W. U. B.S., 1907, Hobart College.
O'Neal, Warwick Christy.....	D. C.	807 Varnum Street. C.E., 1906, Pennsylvania Military College.
Seiler, Justin Frank.....	Ohio	American Univ. Heights. B.A., 1908, The George Washington University.
Smith, Conger Ryder.....	Mich.	Y. M. C. A.
Thompson, Oscar	Wisc.	Treasury Dept.
White, Herbert William.....	Iowa	1700 15th Street. Ph.B., 1907, Simpson College.

Third Year.

Gilmore, Thomas Mador, Jr.....	Ky.	Bond Building.
Homer, John Albert.....	Utah	1806 H Street.

Name.	Legal residence.	City address.
Meriam, Lewis	Mass.	Bureau of the Census. A.B., 1905, A.M., 1906, Harvard University.
Ott, Alfred Walter.....	Ky.	2517 14th Street.
Pearce, Harry Hamlin.....	Mich.	1700 15th Street. A.B., 1905, Albion College.
Scantling, Philip Lee.....	D. C.	1627 R Street.
Swenarton, Harold Augustus.....	N. J.	1538 17th Street. Ph.B., 1905, Yale University.

Special.

Babcock, Richard Earle.....	D. C.	707 G Street.
Behrmann, Carl Martin.....	Ill.	Y. M. C. A.
Billingsley, Jesse Lee.....	Fla.	Metropolitan Hotel.
Borchardt, Edwin Montefiore....	N. Y.	1734 U Street. B.S., 1905, Columbia University. LL.B., 1908, New York Law School.
Bouhan, John J.....	Ga.	1124 8th Street. B.Let., 1905, St. Mary's College.
Bowen, John M.....	Mass.	719 E. Capitol Street.
Bullion, Clarence Leroy.....	Ohio	1305 Rhode Island Ave.
Calvert, John Wentworth.....	Md.	1750 Corcoran Street.
Catlin, Frank Durand, Jr.....	Colo.	910 23d Street.
Childs, Homer Alexander.....	Minn.	150 Tennessee Ave.
Cissell, John Floyd.....	Md.	Silver Spring, Md.
Cohen, Abe	Wisc.	1013 O Street.
Curran, Thomas Leo.....	D. C.	305 1st Street, S. E.
Davis, Harold William.....	Pa.	1736 G Street.
Ellis, Harry Van Horn.....	D. C.	203 C Street, N. E.
Farmer, James Price.....	D. C.	154 A Street, N. E.
Flather, Alfred Chester.....	D. C.	612 8th Street, N. E.
Gudmunsen, Isaac Ray	Idaho	804 19th Street.
Hart, Frederick Cecil.....	Colo.	The Normandie Hotel. A.B., 1909, Harvard University.
Hastings, Grover Cleveland	D. C.	The Madrid.
Hemenway, George R.....	Ind.	The Portland.
Hoover, Frank Willard.....	D. C.	1824 16th Street.
Houston, William Cannon, Jr....	Tenn.	112 3d Street, N. E.
Jacobs, Judson Wriley.....	Md.	14th and U Streets.
Jacobsen, Walter	Minn.	236 New Jersey Ave.
Kimber, Emmor Harper	N. Y.	1311 K Street.
King, Charles Albert.....	D. C.	1818 8th Street.
Koeppler, John Louis.....	Wisc.	504 3d Street.
Kreuttner, Joseph Warwick.....	Va.	The Westover.

Name.	Legal residence.	City address.
Landick, George, Jr.....	Ind.	1358 Fairmont Street.
Lerch, John George.....	D. C.	1520 M Street.
Lewis, George Lippitt.....	D. C.	The Mendota.
Mathews, Roy Lee.....	Ohio	3323 17th Street.
Matthews, Calvin Bruce.....	Tenn.	Navy Yard.
McGill, John Fauntleroy.....	D. C.	Marine Barracks.
Metsker, Glen Roy.....	Wash.	General Land Office.
LL.B., 1908, University of Washington.		
Moore, Hervey Studdiford.....	N. J.	1700 15th Street.
Patterson, Charles H.....	N. Y.	Army and Navy Club.
Graduate, 1903, United States Military Academy.		
Peck, George Curtis.....	N. Y.	House of Rep.
Phillips, Ivon William.....	N. Y.	3560 11th Street.
LL.B., 1908, The George Washington University.		
Ravenel, Gaillard FitzSimons....	D. C.	1611 Riggs Place.
LL.B., 1908, University of Virginia.		
Reed, Philip, Jr.....	Md.	Rockville, Md.
Stipe, William Frederick.....	Iowa	330 Md. Ave., N. E.
Thomas, Columbus Austin.....	D. C.	1231 Girard Street.
Turri, Giulio Luigi.....	Italy	The Highlands.
Doctor of Social Sci., 1905, Royal Institute of Social Science, Italy.		
Wallace, Sebon Rains.....	D. C.	1754 Willard Street.
Warden, Franklin Milton.....	Ill.	1764 U Street.
Watson, Paul Herbert.....	Kans.	1322 Kearney Street.

Master of Patent Law.

Brandenburg, Edgar Thomas.....	N. Y.	Loan & Trust Bldg.
Bruninga, John Hermann.....	Ill.	Patent Office.
LL.B., 1908, The George Washington University.		
Davidson, Arthur William.....	Ohio	19 Grant Place.
B.A., 1899, Western Reserve University.		
LL.B., 1908, The George Washington University.		
Ferguson, John Alexander.....	Mich.	1318 Park Road.
LL.B., 1908, National University.		
Hallauer, Nelson A.....	N. Y.	Patent Office.
LL.B., 1908, National University.		
Hardy, William Abbott.....	Mass.	1615 Florida Ave.
LL.B., 1908, National University.		
Harris, Joseph William.....	Pa.	Patent Office.
LL.B., 1908, National University.		
Hendricks, Walter Frisby.....	Tenn.	1111 H Street.
LL.B., 1907, LL.M., 1908, National University.		

Name.	Legal residence.	City address.
Hidden, Charles Popham.....	N. Y.	1016 13th Street.
M.E., 1897, Stevens Institute of Technology.		
LL.B., 1908, National University.		
Jarboe, Charles Gwinn.....	Md.	The New Berne.
A.B., 1896, A.M., 1901, St. John's College.		
LL.B., 1908, National University.		
Jewett, Nelson Josiah.....	Mich.	3024½ R Street.
LL.B., 1908, Georgetown University.		
Johnston, Robert	Wyom.	Court of Claims.
LL.B., 1906, National University.		
Jones, George Bayard.....	D. C.	The Decatur.
B.S., 1905, Massachusetts Institute of Technology.		
LL.B., 1908, The George Washington University.		
Kneipp, Hugh	Ill.	313 5th Street, S. E.
LL.B., 1901, University of Michigan.		
McKay, Clarence Orson.....	Mich.	Patent Office.
LL.B., 1908, National University.		
MacNab, Forrest Burleigh.....	Mass.	1204 G Street, N. E.
LL.M., 1907, National University.		
Molloy, John	Md.	820 Munsey Building.
LL.B., 1906, LL.M., 1907, Georgetown University.		
Paddock, Lawrence Sands.....	N. J.	Patent Office.
LL.B., 1908, National University.		
Peck, Everett Johnson.....	N. J.	732 17th Street.
LL.B., 1908, National University.		
Pollard, Willard Lacy.....	Ill.	1615 Florida Ave.
Powell, John Goodwin.....	Va.	The Brunswick.
LL.B., 1908, National University.		
Ramsey, George William.....	Ill.	Patent Office.
LL.B., 1908, The George Washington University.		
Richey, Francis Olin.....	D. C.	732 17th Street.
LL.B., 1908, National University.		
Richmond, Carl A.....	Ill.	Marquette Bg., Chicago.
Rowley, Clifford Alonzo.....	D. C.	1344 Kenyon Street.
Shoemaker, William David.....	Md.	Patent Office.
Small, Warren Harvey.....	Mass.	Patent Office.
A.B., 1905, Harvard University.		
Tarbox, John Preston.....	S. C.	McGill Building.
B.A., 1904, Clemson College.		
LL.B., 1908, National University.		
Ulke, Titus	D. C.	411 15th Street.
E.M., 1899, Royal Academy of Mines, Freiberg,		
Saxony.		
LL.B., 1908, The George Washington University.		

Name.	Legal residence.	City address.
Wiegand, Gustave William.....	Minn.	900 K Street.
LL.B., 1902, LL.M., 1908, National University.		
Willard, Charles Franklin.....	Mass.	1333 Fairmont Street.
B.S., 1901, Massachusetts Institute of Technology.		
J.B., 1906, J.M., 1907, Boston University.		
Wilson, Ira Jay.....	Wisc.	Patent Office.
LL.B., 1908, The George Washington University.		

Special Students in Patent Law.

Braselton, Chester Harmon.....	Ill.	Patent Office.
B.S., 1904, Valparaiso University.		
Clark, Elmer A.....	D. C.	134 U Street.

Master of Laws.

Blakesley, Raphael Henry.....	Calif.	2517 14th Street.
LL.B., 1908, University of Southern California.		
Blanchard, Edwin Clay.....	Va.	808 Mass. Ave., N. E.
LL.B., 1908, Georgetown University.		
Calhoun, Clarence Crittenden....	Ky.	The Rochambeau.
M.Dip., 1905, The George Washington University.		
Fravel, F. Russell.....	Mass.	1016 15th Street.
LL.B., 1908, The George Washington University.		
Holmes, Rexford Louis.....	Mo.	1114 D Street, N. E.
LL.B., 1908, The George Washington University.		
Horn, Oscar Leonard.....	Calif.	1615 13th Street.
LL.B., 1908, University of Southern California.		
Legaspi y Villafior, José.....	P. I.	The Sherman.
Maddox, George Amory.....	Md.	1223 Vermont Ave.
A.B., 1896, A.M., 1899, St. John's College.		
LL.B., 1899, University of Maryland.		
Mapa, Emilio	P. I.	813 12th Street.
Newton, Clarence Frank.....	D. C.	Y. M. C. A.
LL.B., 1907, LL.M., 1908, National University.		
Sanderlin, George Bismarck.....	N. C.	509 4th Street.
A.B., 1899, A.M., 1900, Wake Forest College.		
LL.B., 1908, The George Washington University.		
Santos y Basco, José Abad.....	P. I.	Room 33, War Dept.
LL.B., 1908, Northwestern University.		
Ulke, Titus	D. C.	411 15th Street.
E.M., 1889, Royal Academy of Mines, Freiberg, Saxony.		
LL.B., 1908, B.S., 1909, The George Washington University.		
Willis, Robert Chadwick.....	N. C.	300 10th Street, N. E.
A.B., Guilford College.		
LL.B., 1908, The George Washington University.		

Review.

Name.	Legal residence.	City address.
Oberlin, Paca	Va.	Columbian Bldg.
LL.B., 1903, LL.M., 1904,	Columbian University.	
M.Dip., 1905, The George Washington University.		
Symons, William Leonard.....	D. C.	Patent Office.
LL.B., 1895, LL.M., 1896,	Columbian University.	
M.P.L., 1908, The George Washington University.		
Warner, Lee Frost.....	Minn.	Y. M. C. A.
LL.B., 1904, The Columbia University.		

Review, M. P. L.

Giles, Louis Edward.....	Mich.	117, The Ontario.
B.S. in E.E., 1902, Columbian University.		
LL.B., 1907, M.P.L., 1908, The George Washington University.		

Auditor.

Hicks, J. Addison.....	D. C.	Bond Bldg.
LL.B., Georgetown University.		

Summary.**CANDIDATES FOR THE LL.B. DEGREE:**

First year	39
Second year	45
Third year	61
	— 145

CANDIDATES FOR THE B.L. DEGREE:

First year	72
Second year	16
Third year	7
	— 95

CANDIDATES FOR THE M.P.L. DEGREE.....	32
---------------------------------------	----

CANDIDATES FOR THE LL.M. DEGREE.....	14
--------------------------------------	----

SPECIAL STUDENTS	48
------------------------	----

SPECIAL STUDENTS IN PATENT LAW.....	2
-------------------------------------	---

REVIEW STUDENTS	3
-----------------------	---

REVIEW STUDENT IN PATENT LAW.....	1
-----------------------------------	---

AUDITOR	1
---------------	---

DUPLICATES	4
------------------	---

DEPARTMENT OF MEDICINE.

Doctor of Medicine.

First Year.

Name.	Legal residence.	City address.
Borden, Daniel Le Ray.....	D. C.	Conduit Road.
Bricker, Sacks	D. C.	200 15th Street, S. E.
Calver, George W.....	D. C.	207 A Street, S. E.
Corbett, Lowell Munson.....	Va.	Arlington, Va.
Cram, Albert M.....	Vt.	1-2 Iowa Circle.
Eckhardt, John Carl.....	D. C.	1140 18th Street.
FitzHugh, William DeHart, Jr....	Pa.	Vienna, Va.
Fortier, Roy McLeay.....	D. C.	1723 Corcoran Street.
Gallion, John B.....	Okla.	Garfield Hospital.
Gallion, Thomas N.....	Okla.	Garfield Hospital.
Gray, Augustus Clagett.....	Md.	University Hospital.
Gray, Paul	D. C.	627 7th Street.
Hall, Custis Lee	D. C.	1408 Chapin Street.
Helfgott, Max Aaron.....	Russia	401 21st Street.
Helfgott, Nathan	Russia	401 21st Street.
Hankins, Harry Gordon.....	S. Africa ..	1210 12th St., N. W.
Hunter, Oscar Benwood.....	Va.	1305 22d Street.
Knott, Charles O.....	Va.	330 N. C. Ave., S. E.
Landis, Charles Caldwell.....	Cal.	
Lockett, George Sparr.....	D. C.	504 A Street, S. E.
Milburn, Frank Washington....	Va.	Alexandria, Va.
Moore, Charles S.....	Mich. ...	2523 University Place.
Pagan, Albert Elwood.....	D. C.	1965 Biltmore Street.
Posey, Orlando J.....	D. C.	540 5th Street, S. E.
Read, Boyd Richard.....	D. C.	1819 N. Capitol Street.
Rollings, John Adolph.....	W. Va.	1143 22d Street.
Ruppert, Charles Christian.....	D. C.	611 K Street, N. W.
Scarito, Nicolo	Italy	1021 8th Street.
Schaub, Gustav Adolphus.....	Texas	1419 Chapin Street.
Shea, George Marvin White....	D. C.	1502 P Street.
Sloat, Jesse Irving.....	D. C.	23 1st Street, N. E.
Travis, John Randolph.....	Va.	1234 Massachusetts Ave.

Second Year.

Bacon, Walter Compton.....	D. C.	808 11th Street, N. E.
Bailey, William Otis.....	S. C.	1217 N Street.
Beauchamp, Ellis Franklin.....	Va.	1206 O Street.
Brewer, Gilbert Roscoe.....	Ill.	401 M Street, N. E.

Name.	Legal residence.	City address.
Brock, Charles Le Roy.....	D. C.	1912 9th Street.
Burnett, Roy Edgar.....	Okla.	1221 O Street.
Castleman, Philip	Mass.	902 Westminster Street.
Cox, Clem	Va.	641 D Street, S. E.
Crane, Charles George.....	N. Y.	1221 O Street.
Dougherty, Bernard Joseph.....	N. Y.	1105 14th Street.
Downey, Alice Winans.....	D. C.	2473 18th Street.
Dyer, John Christopher.....	Ohio	310 10th St., N. E.
Eisenberg, Arthur Alexander.....	D. C.	1213 4½ Street, S. W.
Ellison, Everett Monroe.....	Tenn.	411 3d Street.
Eppard, George I.....	Va.	1921 G Street.
Fisher, Charles Albert.....	Pa.	38 I Street, N. E.
Hayton, Charles Henry.....	S. Africa ..	Foreign Mission'y Semi- nary, Takoma Park.
Hunt, Isaac Burton.....	Tenn.	702 H Street.
Ingle, Ernest Wilfred.....	S. Africa ..	1210 12th Street.
Irmen, Felix Arnold.....	D. C.	212 Morgan Street.
Jaeger, Henry William.....	D. C.	15 4th Street, S. E.
Jewell, Benson Mundy.....	Ill.	623 19th Street.
Kemeys, William	D. C.	1633 29th Street.
Kress, Ora Hannah.....	D. C.	Takoma Park, D. C.
Leonard, George Ferree.....	N. C.	1305 H Street.
Marquez, Ramón Isaac Janer....	Porto Rico.	1024 17th Street.
Martin, Aaron Wise.....	N. C.	2040 I Street.
Molzahn, Albert John.....	Neb.	Methodist Home.
Mooers, Harold Alonzo.....	D. C.	Takoma Park, D. C.
Oliver, Harry Waterhouse.....	N. D.	2517 14th Street.
Parks, Anderson W.....	Colo.	511 10th Street.
Pitt, Richard V.....	Va.	816 18th Street.
Ralph, Charles Edward.....	Ill.	411 3d Street.
Read, Effie Alberta.....	Mass.	Dept. of Agriculture.
Rougeou, Charles Franklin.....	La.	1815 G Street, N. W.
Sharp, George Tarplit.....	D. C.	3101 Highland Ave.
Shoemaker, Ralph W.....	D. C.	3116 P Street.
Sinclair, Lieth Llewellyn.....	D. C.	327 M Street, S. E.
Smith, Arthur C.....	N. Y.	735 13th Street.
Zimmerman, Carl George.....	N. Y.	735 13th Street.

Third Year.

Amoss, Harold Lindsay.....	Ky.	U. S. Dept. of Agric.
Andrews, Lawrin Lundy.....	Kans.	1327 N Street, N. W.
Beale, Kenneth Foster.....	Md.	831 7th Street.
Barrett, Park Mitchell.....	W. Va. ...	1102 L Street.

Name.	Legal residence.	City address.
Davis, George von Pullinger.....	Pa.	1307 9th Street.
Duenner, Robert Henry.....	Tenn.	1700 15th Street.
Elliott, Leo Louis.....	N. Y.	G. Washington Un. Hos.
Fetzer, Lewis William.....	N. Y.	338 Adams Street, N. E.
Frey, John Paul.....	D. C.	1224 30th St., N. W.
Glennan, Kenneth Rayner.....	Md.	Chevy Chase, Md.
Goss, Audrey	Kans.	1443 Massachusetts Ave.
Herring, Katherine M.....	Iowa	14th and Girard Sts.
Hoover, George W.....	Okla.	U. S. Dept. of Agric.
Hornaday, Frank A.....	D. C.	1310 N. C. Ave., N. E.
Huntington, William Henry.....	D. C.	2330 Massachusetts Ave.
Kerby, James Philip.....	D. C.	2606 L Street.
Kinner, Jesse Lee.....	N. Y.	
Klingerman, George E.....	Pa.	1519 Kingman Place.
Lewis, Harry Samuel.....	D. C.	54 I Street.
Loop, Floyd Addison.....	Pa.	1519 Kingman Place.
McLoone, John Joseph.....	Pa.	717 H Street.
McMillan, Walter Alexis.....	S. C.	1317 F Street, N. W.
Machler, Francis Patrick.....	Ill.	1219 Q Street, N. W.
Marriott, William McKim.....	N. Y.	3221 Highland Ave.
Morian, Clarence	Pa.	
Nelson, Nesmith	D. C.	1737 1st Street.
Neville, James Alan	Nebr.	2517 14th St., N. W.
Paige, Wendell A. H.....	Vt.	1506 Q Street.
Peyton, Harry Alexander.....	D. C.	Columbia Hospital.
Piburn, John Logan.....	Mo.	S. G. O. War Dept.
Price, Walter	D. C.	438 N. J. Ave., S. E.
Ross, Erwin Worth.....	N. C.	1700 15th Street, N. W.
Rozelle, Keith Kistler.....	N. C.	1324 I Street.
Scanlon, Franklin Taylor.....	W. Va.	1117 I Street, N. W.
Sorensen, Antone Christian.....	Utah	1115 I Street.
Tibbets, Albert Perkins.....	N. H.	1018 14th Street.
Titus, Elijah White.....	Va.	Children's Hospital.
Waller, Clifford E.....	Ala.	Indian Office.
White, Lyle Charles.....	Ohio	The Stanhope.
Williams, Robert Cleveland.....	N. C.	1005 13th Street.
Young, Clifton E.....	D. C.	2509 Wisconsin Ave.

Fourth Year.

Bales, Ernest Norment.....	Cal.	637 E. Capitol Street.
Brooks, James Joseph Lester.....	D. C.	465 Florida Ave.
Chappell, Sidney Lovett.....	D. C.	3901 Grant Road.

Name.	Legal residence.	City address.
Clark, Albert Patton.....	D. C.	1217 Harvard Street.
Collins, James Cleveland.....	D. C.	1437 S Street.
Conklin, Rush West.....	Md.	Hyattsville, Md.
Craft, Clarence Christian.....	S. C.	1116 10th Street, N. W.
Dunn, Abner Beebe.....	Pa.	G. Washington Un. Hos.
Fair, Charles Hardy.....	Va.	Providence Hospital.
Folkmar, Elenora C.....	Wis.	
French, Sanford Williams.....	N. Y.	The Majestic Apt.
Gouchenour, David Thomas.....	Va.	28 R Street, N. W.
Griffin, Clarence Herbert.....	Mass.	1538 17th St., N. W.
Habel, William Parker Herbst...	Pa.	1819 Q Street.
Hastings, John Emery.....	N. Y.	3034 Cambridge Place.
Hoey, J. Joseph.....	R. I.	723 18th Street.
Jobson, William Russell.....	Pa.	823 19th Street.
Keneipp, Edgar P.....	Ill.	136 D Street, S. E.
Klugh, George Fred.....	S. C.	159 Randolph Place.
Lind, John Edward.....	Iowa	506 A Street, N. E.
McEnery, Douglas Wiltz.....	La.	1366 Kenyon Street.
McKnight, Frederick W.....	Ohio	612 22d Street.
McLaughlin, William Frank.....	Pa.	Emergency Hospital.
Mata, Carlos	Cen. Amer.	1208 M Street.
Michelsoni, Louis Antony.....	Uruguay ...	P. O. Box 8.
Neail, Howard A.....	N. Y.	Casualty Hospital.
Pole, Samuel Boyce, Jr.....	D. C.	216 8th Street, N. E.
Powell, Robert Llewellyn.....	Va.	934 O Street.
Rhees, Benjamin Rush.....	D. C.	Stratford Hotel.
Simonton, Lawrence Joseph.....	Ind.	1855 Calvert Street.
Sisco, Henry N.....	D. C.	1344 Vermont Ave.
Sullivan, James Francis.....	R. I.	614 I Street.
Turnbull, Samuel Jay.....	Fla.	1110 New York Ave.
Vasenius, Frederick Walter.....	Finland ..	1210 12th Street.
Watson, John W.....	D. C.	201 Nichols Ave.
Watters, Benjamin Courtney....	Md.	1013 H Street, N. W.
Weidemann, Clarence Conrad....	D. C.	1237 Girard Street.
Weiler, George L.....	Utah	504 3d Street.
Weithas, Richard Charles.....	N. Y.	1005 13th Street.
White, Gershom Franklin.....	Ohio	The Brunswick.
Willis, John Mitchell.....	W. Va.	Sibley Hospital.
Wood, William Pleasant	Ohio	1013 H Street.

Special.

Selehaddin, MouhammedTurkeyTakoma Park, D. C.

Summary.

CANDIDATES FOR THE M.D. DEGREE:

First year	32
Second year	40
Third year	41
Fourth year	42
Special	—

— 156

DEPARTMENT OF DENTISTRY.

Doctor of Dental Surgery.

First Year.

Name.	Legal residence.	City address.
Beers, Lloyd Y.....	Pa.	1530 3d Street.
Bingman, Harry	Pa.	617 Morris Street, N. E.
Calvert, Samuel C.....	Iowa	1705 13th Street.
Flores, Placido	P. I.	"The Shoreham."
Gonzalez, Claudio Trejos.....	Costa Rica.	1208 M Street.
Hoffman, Thomas	Mass.	Interstate Commerce Commission.
McCausland, John McGirk.....	Pa.	1506 Caroline Street.
Pagán, José Antonio Marchani...	Porto Rico.	306 E Street, N. E.
Marsh, Bradford Cleveland.....	R. I.	1339 Irving Street.
Rubino, Alfredo A.....	S. A.	119 Baltimore Ave., N. Takoma Park.
Stone, Eugene Roger.....	Wisc.	1810 G Street.
Sibley, George Julian.....	Md.	2129½ Pa. Ave.
Sandoval, Domiciano J.....	P. I.	726 12th Street.
Schwarzmann, Erwin George.....	Va.	209 S. Alfred Street, Alexandria.
Shearer, Norman P.....	Wisc.	213-A Bates Street.
Stockman, Frank J.....	Mo.	208 Y. M. C. A.
Terflinger, Albert Ernest.....	D. C.	Takoma Park, D. C.
Wood, Homer Ernest.....	D. C.	650 East Capitol Street.

Second Year.

Butterfield, Louie W.....	Iowa	229 P Street.
Eslin, Melville P.....	D. C.	637 Md. Ave., N. E.
Hurwitz, Maurice	Mass.	1006 H Street.
Robinson, James N.....	W. Va.	314 2d Street, N. E.
Sherfy, Raphael	Pa.	3019 11th Street.

Third Year.

Name.	Legal residence.	City address.
Angelo, Guy W.....	Va.	124 Seaton Place.
Barnhard, William Harry.....	Ohio	809 13th Street.
Bear, Ewing Marvin Wood.....	D. C.	912 I Street.
Cannon, Claude Q.....	Utah	510 I Street.
Davidson, Albert S.....	D. C.	321 A Street, S. E.
Goldberg, Max S.....	D. C.	627 D Street.
Irby, Charles B.....	Va.	G. Washington Un. Hos.

Summary.**CANDIDATES FOR THE D.D.S. DEGREE:**

First year	18
Second year	5
Third year	7

— 30

NATIONAL COLLEGE OF PHARMACY.**Doctor of Pharmacy.****Freshmen.**

Name.	Legal residence.	City address.
Boyer, W. Day.....	Md.	620 H Street, N. W.
Beeson, Loring W.....	Iowa	664 Mass. Ave., N. E.
Butler, Homer K.....	Md.	924 F Street, N. W.
Colomb, William	Vt.	York St., Swanton, Vt.
Conrad, Chas. T., Jr.....	D. C.	2014 9th Street, N. W.
Dammeyer, C. F. W., Jr.....	Md.	11th and E. Capitol St.
Feller, F. M.....	Va.	1242 N. J. Ave., N. W.
Gass, C. B.....	Md.	1100 14th Street, N. W.
Grubbs, L. R.....	Md.	76 I Street, N. W.
Hupperman, C.	D. C.	338 I Street, S. W.
Hardey, J. Costello.....	Md.	301 Pa. Ave., S. E.
Henderson, C. W.....	Va.	1415 Ames Place, N. E.
Joachim, A. B.....	D. C.	316 4½ Street, S. W.
Jenkins, Lawrence J.....	Va.	Agr. Dept., Bu. of Chem.
Morris, Edgar	S. C.	1827 H Street, N. W.
McCann, Wm. H.....	Mass.	607 E Street, N. W.
Marsden, F. A.....	D. C.	1731 1st Street, N. W.
Moody, Harold D.....	Pa.	923 S. C. Ave., S. W.
Mangum, L. H.....	D. C.	3823 14th Street, N. W.
Norton, Wm. H.....	Wash.	932 Westminster Street.
Rossiter, J. A.....	D. C.	805 7th Street, N. E.

Name.	Legal residence.	City address.
Schommer, J. B., LL.B.....	Wisc.	1 R Street, N. E.
Snyder, Carl J.....	D. C.	3111 16th Street, N. W.
Whitebread, C.	Wisc.	741 Girard Street, N. W.
Hohberger, Sam'l J.....	D. C.	50 M Street, N. W.

Juniors.

Boyd, George W.....	D. C.	121 2d Street, N. E.
Feller, R. W.....	Va.	1242 N. J. Ave., N. W.
Gill, T. L.....	Va.	9th and P Sts., N. W.
Hogan, John D. A.....	D. C.	19 7th Street, N. E.
Henderson, W. K.....	Va.	1371 F Street, N. E.
Harbaugh, L. M.....	D. C.	1375 Emerson St., N. E.
Hanback, Clifford I.....	D. C.	44 N. Y. Ave., N. E.
Judd, Ralph A.....	D. C.	524 7th Street, S. W.
Kenner, A. W.....	Mass.	1711 17th Street, N. W.
Lampman, Worden E.....	Canada	725 14th Street, N. W.
Morgan, J. Harold.....	D. C.	Bethesda, Md.
Peters, D. B.....	Va.	Sub-station "L," D. C.
Richardson, Naomi E.....	D. C.	3166 18th Street, N. W.
Strobel, Julia H.....	D. C.	16 R Street, N. W.
Plunkett, P. E.....	Md.	1646 Irving St., N. W.
Tschiffely, Douglas	Md.	475 Pa. Ave., N. W.
Wilson, Eugene F.....	Del.	1718 Corcoran St., N. W.

Seniors.

Bailey, Ray T.....	D. C.	1823 N. H. Ave., N. W.
Crosen, George R.....	Va.	10th & Va. Ave., S. W.
Elvove, Elias, B.S. & M.S.....	Pa.	Station "G," Box 2304.
Hughes, H. D.....	D. C.	1329 29th Street, N. W.
Jones, Wm. S.....	Va.	2112 G Street, N. W.
Jones, T. Quinn.....	Mo.	1225 O Street, N. W.
Nolan, J. I.....	Ill.	1164 5th Street, N. E.
Payne, E. V.....	Va.	203 D Street, N. E.
Payne, D. B.....	Va.	639 Md. Ave., N. E.
Robey, Frank A.....	Va.	Herndon, Va.
Reese, Chauncy C.....	Md.	15 E. Raleigh Ave., "Ghent," Norfolk, Va.
Richardson, Irene Nellie.....	D. C.	3166 18th Street, N. W.
Salb, George R.....	D. C.	617 9th Street, N. E.
Senay, Harry J.....	D. C.	439 K Street, N. W.
Thibadeau, R. B.....	Ga.	300 Monroe Street, Ana- costia, D. C.
Thompson, Milton C.....	D. C.	606 G Street, S. E.

Special.

Name.	Legal residence.	City address.
Dennis, W. Miss., Ph.D.....	Ill.	The Marlborough.
Goodnow, Edward H., B.S.....	Mass.	2476 Ontario Road.
Hillyer, William Eldridge.....	Fla.	1365 Park Road.
B.S., 1899, M.S., 1900, Columbian University.		
Palmon, Julian I., B.S. & M.S....	Md.	Bureau of Chemistry.
Taber, Walter C., M.S.....	Calif.	1381 N. C. Ave., N. E.

Summary.

Freshmen	25
Juniors	17
Seniors	16
Special	5

— 63

COLLEGE OF VETERINARY MEDICINE.**Doctor of Veterinary Surgery.**

Name.	Legal residence.	City address.
Bechtoldt, Frank E.....	Pa.	144 Quincy Place, N. E.
Brett, George Wesley.....	Mass.	2118 P Street.
Close, Lewis Raymond.....	D. C.	325 Mass. Ave., N. E.
Dillard, William Edward.....	Ill.	2027 13th Street.
Divine, John Parker.....	D. C.	Bu. of Chem., Agr. Dept.
Franz, Louis John.....	Wisc.	810 5th Street.
Fry, William H.....	D. C.	104 10th Street, S. E.
Graham, Charles Roy.....	Pa.	1824 9th Street.
Graham, William Henry.....	Pa.	Room 635, P. O. Bldg.
Graves, James Clay.....	Ky.	Kenilworth, D. C.
Graybill, Harry Webster.....	Neb.	1828 15th Street.
Grubb, Chauncey Merle.....	Md.	505 Stanton Place, N. E.
Hicks, Greydon, St. Clair.....	Mich.	621½ Park Road.
Hicks, Tunis	Mich.	621½ Park Road.
Hornbaker, Joseph Nourse.....	Va.	1842 V Street.
Hugins, Frank Almon.....	Mass.	921 Massachusetts Ave.
Humphrey, Charles Wm.....	Pa.	213 4th Street, S. E.
Irby, Robert Garland.....	D. C.	1348 Euclid Street.
Koon, George Henry.....	N. Y.	1628 G Street, S. E.
Kushner, Albert	Md.	1204 6th Street.
Leakin, Charles Melvin.....	Md.	Washington Navy Yard.
Lowry, William B.....	D. C.	603 H Street, N. E.
McCarthy, Henry Joseph.....	Md.	304 H Street.

Name.	Legal residence.	City address.
Maher, William Albert	Va.	220 12th Street, S. E.
Miller, Ezra William.....	Va.	1404 Belmont Street.
Moore, Charles S.....	Mich.	2523 University Place.
B.S., 1908, The George Washington University.		
Morse, James Watson.....	Md.	1305 Rhode Island Ave.
O'Hara, William Henry.....	Wisc.	2414 N. Capitol Street.
Pagan, Robert	Ill.	1965 Biltmore Street.
Plunkert, Charles M.....	D. C.	439 O Street.
Riley, Edward Henry.....	Minn.	Bu. An. Ind., Agr. Dept.
Royse, Frederick A.....	Iowa	914 F Street, N. E.
Shore, Howard J.....	N. C.	Bu. An. Ind., Agr. Dept.
Smith, Robt. Hamilton.....	D. C.	1735 Willard Street.
White, George Elwood.....	Mass.	323 East Capitol Street.

Summary.

CANDIDATES FOR DEGREE OF D.V.M.....	35
-------------------------------------	----

GEOGRAPHICAL DISTRIBUTION OF UNIVERSITY STUDENTS.

Alabama	6	Rhode Island	8
Arizona	3	South Carolina	13
Arkansas	5	South Dakota	8
California	10	Tennessee	13
Colorado	7	Texas	15
Connecticut	7	Utah	7
Delaware	8	Vermont	9
District of Columbia.....	573	Virginia	87
Florida	8	Washington	7
Georgia	9	West Virginia	9
Idaho	7	Wisconsin	28
Illinois	48	Wyoming	2
Indiana	21	Argentine Republic	1
Iowa	21	Australia	1
Kansas	10	Canada	3
Kentucky	17	Central America	1
Louisiana	5	China	5
Maine	7	Costa Rica	1
Maryland	89	Cuba	1
Massachusetts	55	England	3
Michigan	26	Finland	1
Minnesota	17	France	2
Mississippi	11	Germany	4
Missouri	18	Greece	1
Montana	2	Italy	3
Nebraska	14	Mexico	1
New Hampshire	6	Nova Scotia	1
New Jersey	18	Peru	1
New Mexico	1	Philippine Islands	9
New York	73	Porto Rico	4
North Carolina	21	Russia	4
North Dakota	5	South Africa	3
Ohio	38	Switzerland	1
Oklahoma	8	Turkey	1
Oregon	6	Uruguay	4
Pennsylvania	78		

RECAPITULATION.

MEMBERS OF FACULTIES AND TEACHING STAFF:

Professors	83
Associate Professors	7
Assistant Professors	22
Associates, Instructors, Demonstrators and Assistants....	61
Lecturers	12
<hr/>	
Total	185

STUDENTS:

Graduate	114
Undergraduate	692
College of the Political Sciences.....	89
Professional	625
<hr/>	
Duplicates	12
<hr/>	
Total	1508

DEPARTMENT OF ARTS AND SCIENCES:

	Faculty.	Students.
Faculty of Graduate Studies.....	45	114
Undergraduate Colleges and Divisions including the College of the Political Sciences.....	49	781
<hr/>		94
		<hr/> 895

PROFESSIONAL DEPARTMENTS:

Department of Law.....	18	341
Department of Medicine.....	68	156
Department of Dentistry.....	14	30
National College of Pharmacy.....	10	63
College of Veterinary Medicine.....	15	35
<hr/>		125
Totals	219	625
Duplicates	34	12
<hr/>		<hr/>
Totals	185	1508

Degrees Conferred.

DEGREES CONFERRED AT COMMENCEMENT, 1908.

HONORARY.

Doctor of Laws.

Willis Seaver Paine, New York.

Frederick James Volney Skiff, Illinois.

IN COURSE.

Bachelor of Arts.

Frank Coy Allis, New York.

LL.B., 1903, Cornell University.

LL.M., 1906, The George Washington University.

Grace Evelyn Barbour, Missouri.

Bertha Birtwell, Pennsylvania.

(With distinction.)

Lula Elizabeth Conner, District of Columbia.

Roi De Lancy, Ohio.

John Howard Dellinger, Ohio.

Helen Marie Evans, District of Columbia.

(With distinction.)

Selden Marvin Ely, District of Columbia.

LL.B., 1894, LL.M., 1895, The George Washington University.

Ruth Genevieve Field, Wisconsin.

Edward Percy Gates, Arkansas.

Charles Augustus Heiss, Pennsylvania.

Howard Colwell Hopson, Wisconsin.

Catharine Agatha McAvoy, District of Columbia.

(With distinction.)

Jane Mahan, West Virginia.

Pearl Ketcham Merritt, Minnesota.

Jennie Moyer, District of Columbia.

Katherine May Raber, Ohio.

Claus Johann Schwartz, District of Columbia.

Justin Frank Seiler, Ohio.

Ogle Ridout Singleton, District of Columbia.

Jessamine Eliza Swartwout, District of Columbia.

William Cabell Van Vleck, District of Columbia.

(With distinction.)

Bachelor of Science.

Mary Page Crawford, Virginia.
Alvin Wilson Miller, Illinois.
Charles Somerville Moore, Michigan.
Charles Calvin Smoot, Virginia.
John Adlum Sterrett, District of Columbia.
Harold English Stonebraker, Pennsylvania.
Emma Matthews Vaughan Triepel, North Carolina.

Bachelor of Science in Chemistry.

Edward Oliver Reed, District of Columbia.

Bachelor of Science in Civil Engineering.

Raymond Tilton Davis, Maryland.
Thomas Richard Senior, Jr., District of Columbia.
William James Turkenton, District of Columbia.

Bachelor of Science in Electrical Engineering.

Robert Fleming Fleming, District of Columbia.
Hayner Haskell Gordon, Ohio.

Bachelor of Science in Mechanical Engineering.

Eugene Maurice Ball, District of Columbia.
Harry Clement Gibson, Pennsylvania.
Elton Willard Miller, California.

Civil Engineer.

Edwin Hauptman King, District of Columbia.
B.S. in C.E., 1907, The George Washington University.
David Albert Molitor, Wisconsin.
B.S. in C.E., 1908, The George Washington University.

Electrical Engineer.

Mark Rittenhouse Woodward, District of Columbia.
B.S. in E.E., 1905, The George Washington University.

Master of Science.

Katherine Harrington, District of Columbia.
B.S., 1906, The George Washington University.

Master of Arts.

Horace Hatch Custis, District of Columbia.
B.A., 1906, Johns Hopkins University.

- John Homer Deis, District of Columbia.
LL.B., 1902, The George Washington University.
- Thomas Latimer Kibler, Virginia.
A.B., 1904, Randolph-Macon College.
- John Elliot Ross, District of Columbia.
A.B., 1902, Loyola College.
- Charles Wesley Tenney, Montana.
Ph.B., 1898, Willamette University.

Doctor of Philosophy.

- Frank Cummings Cook, Connecticut.
B.A., 1900, M.A., 1902, M.S., 1904, Yale University.
- Benjamin George Wilkinson, District of Columbia.
B.A., 1897, University of Michigan.
M.A., 1905, Union College.

Doctor of Medicine.

- Frederick Scott Avery, Michigan.
- Clarence Sanborn Bossert, Wisconsin.
- John Edson Bowers, Indiana.
- Frank J. Brown, Iowa.
- Andrew Johnson Browning, Maryland.
- William Alvin Bryan, Iowa.
- Benjamin Franklin Cliff, North Carolina.
- Roy Franklin Dunmire, Pennsylvania.
- Ernest Day Everett, Missouri.
A.B., 1899, Baker University.
- Algernon Sydney Garnett, Virginia.
- George Matthew Gehringer, Pennsylvania.
- Thomas Everett Griffith, Pennsylvania.
- George H. Hart, Pennsylvania.
V.M.D., 1903, University of Pennsylvania.
- Arthur William Hewitt, Ohio.
- Daniel Witter Higgins, Maryland.
- John Wilson Hopkins, Minnesota.
- Edmund Joseph Horgan, District of Columbia.
- William Marion Irbysmith, Kentucky.
A.B., 1901, A.M., 1901, Georgetown College, Kentucky.
- Charles Solomon Lawrence, North Carolina.
- John Ramsey Littlefield, District of Columbia.
- Robert Stanley MacKnight, Michigan.
- Maurice Hopkins Maxwell, Maryland.
- Herman Emil Molzahn, Minnesota.
- John Sweyn Neate, District of Columbia.

Edward Rogers Noyes, District of Columbia.
Harry Alfred Ong, Ohio.
Orra Edgar Patterson, Illinois.
Herbert Samuel Pyne, Utah.
Ralph Andre Quick, Virginia.
Riley Russell, Illinois.
William Bertram Scott, Oregon.
 B.Lit., 1896, B.S., 1906, Willamette University.
John Wesley Sherwood, Maryland.
Harry Emmerich Simons, District of Columbia.
Ernest Wellington Smith, West Virginia.
Harry Marbury Tayloe, Virginia.
Edward Taylor, Alabama.
 B.S., in Phar., 1903, Alabama Polytechnic Institute.
William Davis Tewksbury, Colorado.
Lewis Royer Thompson, Pennsylvania.
 A.B., 1900, Ursinus College.
Frederick Clarence Weber, Ohio.
 B.S., Ohio State University.
Frederick Gordon Whamond, Illinois.
Charles Wheatley, Maryland.
Arthur Joseph Wheeler, Illinois.
Joseph Victor Wilhelm, Illinois.
James Thruston Wolfe, Virginia.
Rowland Daniel Wolfe, Maryland.

Doctor of Dental Surgery.

William Richard Addison, Wisconsin.
James Walter Bernhard, Pennsylvania.
Alan Smith Boarman, Maryland.
Emlyn James Britton, Pennsylvania.
Robert Henry Clark, Indiana.
Alfred William Cummings, Kansas.
Thomas Leon Fairfield, District of Columbia.
Arthur Wellesley Gash, Rhode Island.
John Alexander Grubbs, Virginia.
Casper Florian Helmig, Missouri.
Charles Millington Higgins, West Virginia.
Walter Henry Hildreth, New York.
 A.B., 1892, A.M., 1904, Amherst College.
Herbert Cornwell Hopkins, District of Columbia.
William Clarence Houghtelin, Kansas.
Harry Dow Johnson, Missouri.
Herbert Spencer Murdock, Missouri.

George Francis Peck, New Jersey.
 George Smitten, District of Columbia.
 Henry Cissel Young, Maryland.

Doctor of Pharmacy.

W. Roby Boyer, Maryland.
 Carroll G. Deming, District of Columbia.
 Henry B. Floyd, Texas.
 Morris A. Pozen, Russia.
 Robert Bruce Spencer, North Carolina.
 Ernest H. Steele, Virginia.
 William D. Thorn, District of Columbia.
 T. O. Timberlake, Virginia.

Bachelor of Laws.

Posey John Altizer, Virginia.
 Charles Rogers Arundell, District of Columbia.
 Howard Johnson Atwell, Virginia.
 John Christopher Wagner Beall, District of Columbia.
 Colley Wood Bell, District of Columbia.
 Bertram Philip Berger, New York.
 Frank Marshall Betts, Arkansas.
 John Henry Binsted, District of Columbia.
 Harry Luther Boesch, District of Columbia.
 Frank Hunter Bowen, Massachusetts.
 Maxwell Rice Brothers, Utah.

(As of 1901.)

Paul Campbell, Tennessee.
 Ira J. Carr, Michigan.
 Edmund Carrington, District of Columbia.
 Andrew Christensen, Utah.
 Fayette Dickinson Couden, Massachusetts.
 B.S., 1904, Massachusetts Agricultural College.
 Harold Bert Cutler, Iowa.
 Arthur William Davidson, Ohio.
 A.B., 1899, Western Reserve University.
 Harry Blaine Durham, Nebraska.
 Ph.B., 1904, Nebraska Wesleyan University.
 Walter Bohrer Guy, District of Columbia.
 Ph.B., 1905, Lafayette College.
 Clinton Henry Hartson, Washington.
 Moses Walton Hendry, Maryland.
 A.B., 1903, Johns Hopkins University.
 Samuel Joseph Henry, District of Columbia.

Louis Frederick Hepburn, Pennsylvania.

Philip Simmons Hichborn, District of Columbia.

Albert Clare Hindman, Pennsylvania.

Howard Raymond Hinshaw, Nebraska.

Rexford Louie Holmes, Missouri.

Allen Harrison Hughey, Texas.

B.A., 1903, Vanderbilt University.

Eustacio S. Ilustre, Philippine Islands.

George Bayard Jones, Missouri.

B.S., 1905, Massachusetts Institute of Technology.

Robert McGuire Jones, Virginia.

B.A., 1902, William and Mary College.

Michael Levin, Wisconsin.

Henry Latané Lewis, Maryland.

George Browning McClellan, Hawaii.

Ira Bennett McNeal, Pennsylvania.

A.B., 1898, Dickinson College.

Henry Howard Mancha, Michigan.

Allan Pomeroy Matthew, California.

A.B., 1903, University of California.

Lucius Randolph Mason, Maryland.

William Lewis Miller, District of Columbia.

Paul Mitchell, Pennsylvania.

A.B., Allegheny College.

Curt Berthold Mueller, Ohio.

A.B., 1906, Cornell University.

William Ashford Murphy, Washington.

Claud Worthington Owen, Maryland.

Charles Francis Owens, Maryland.

James Frosst Patterson, District of Columbia.

Walter Watts Patterson, Georgia.

A.B., University of Georgia.

LL.B., Grant University.

Adon Daniel Phillips, New York.

B.S., 1906, The George Washington University.

Ivon William Phillips, New York.

Leon Pretzfelder, Virginia.

George William Ramsey, Illinois.

Don Seavey Rathbun, Iowa.

B.S., 1904, Cornell College.

Paul Allen Rehr, Pennsylvania.

Reginald Rutherford, Maryland.

George Bismarck Sanderlin, North Carolina.

A.B., 1899, A.M., 1900, Wake Forest College.

James MacDermott Sheridan, Colorado.

Ellison Griffith Smith, South Dakota.

Simon Bernard Stein, Massachusetts.

Howard William Stull, Pennsylvania.

Charles Algernon Sunderlin, Nebraska.

A.B., 1907, Nebraska University.

Louis Kossuth Sunderlin, Iowa.

Samuel Swayze, New Jersey.

Louis Ralph Taylor, Illinois.

Robert Hite Turner, Virginia.

Frank Hubbard Twyeffort, New York.

William Kemper West, Kentucky.

Robert Chadwick Willis, North Carolina.

A.B., Guilford College.

Ira Jay Wilson, Wisconsin.

Lester Hood Woolsey, New York.

A.B., 1901, Harvard University.

Master of Patent Law.

Samuel Nicholas Acker, District of Columbia.

LL.B., 1906, National University.

Joseph McCarter Bowyer, Pennsylvania.

LL.B., 1907, The George Washington University.

Theodore Keller Bryant, New York.

LL.B., 1897, LL.M., 1898, Cornell University.

Moncure Burke, District of Columbia.

LL.B., 1904, National University.

Louis Edward Giles, Michigan.

B.S. in E.E., 1902, LL.B., 1907, The George Washington University.

William Samuel Graham, District of Columbia.

LL.M., 1907, National University.

Charles Stanton Grindle, Ohio.

LL.B., 1907, National University.

Paul Rankin Hallam, Kentucky.

LL.B., 1908, The George Washington University.

William Barron Kerkam, District of Columbia.

LL.B., 1906, LL.M., 1907, National University.

Albert Lewers, Nevada.

LL.B., 1907, National University.

Robert Magrane, New York.

A.B., 1903, A.M., 1904, Harvard University.

Thomas L. Mead, Jr., Ohio.

Ph.B., 1901, Western Reserve University.

LL.B., 1907, The George Washington University.

Curt Berthold Mueller, Ohio.

A.B., 1906, Cornell University.

Edwin Augustus Packard, Massachusetts.

B.S., 1899, Massachusetts Institute of Technology.

LL.B., 1908, The George Washington University.

George Francis Scull, New York.

LL.B., 1907, National University.

Lester Abbot Stanley, District of Columbia.

LL.B., 1907, National University.

William Leonard Symons, Ohio.

LL.B., 1895, LL.M., 1896, Columbian University.

Samuel Mortimer Ward, Jr., District of Columbia.

LL.B., 1906, National University.

Henry Trumbull Williams, Massachusetts.

S.B., 1903, Harvard University.

LL.B., 1907, The George Washington University.

Dann Leonard Wood, District of Columbia.

LL.B., 1907, National University.

Franklin Tuthill Woodward, District of Columbia.

A.B., 1901, Dickinson College.

LL.B., 1907, The George Washington University.

Master of Laws.

John Frederick Barth, Kentucky.

LL.B., 1907, The George Washington University.

Eugene Foster Brigham, Georgia.

LL.B., 1907, University of Virginia.

Ralph Marshall Hattersley, Ohio.

LL.B., 1907, The George Washington University.

Ora Herbert Roberts, Indiana.

LL.B., 1907, The George Washington University.

Corry Montague Stadden, Ohio.

LL.B., 1907, The George Washington University.

Edward Smith Stewart, Maryland.

LL.B., 1907, The George Washington University.

Omar Jay Veley, District of Columbia.

LL.B., 1907, The George Washington University.

DEGREES CONFERRED AT FALL CONVOCATION, 1908.

IN COURSE.

Civil Engineer.

Thomas Richard Senior, Jr., District of Columbia.

B.S. in Civil Engineering, 1908, The George Washington University.

Master of Arts.

Oscar Lee Owens, Maryland.

B.D., 1905, Rochester Theological Seminary.

Doctor of Medicine.

Ezra McKnight Davis, South Carolina.

William Joshua Groot Thomas, District of Columbia.

Bachelor of Laws.

Charles Louis Allen, South Dakota.

Archibald Tanner Banning, Jr., New York.

A.B., 1904, Cornell University.

John Hermann Bruninga, Illinois.

F. Russell Fravel, Virginia.

Arthur Wyman Glennan, District of Columbia.

Dyer Smith, New Jersey.

M.E., 1903, Lehigh University.

Titus Ulke, District of Columbia.

E.M., 1889, Royal Academy of Mines, Freiberg, Saxony.

DEGREES CONFERRED AT WINTER CONVOCATION, 1909.**HONORARY.****Doctor of Laws.**

Alfred Harding, District of Columbia.

Charles Evans Hughes, New York.

Theodore Roosevelt, New York.

IN COURSE.**Bachelor of Arts.**

Ulysses Grant Baker Pierce, District of Columbia.

James Owens Wrightson, District of Columbia.

Bachelor of Science.

Titus Ulke, District of Columbia.

E.M., 1889, Royal Academy of Mines, Freiberg, Saxony.

LL.B., 1908, The George Washington University.

Bachelor of Science in Electrical Engineering.

Harlan Verne Honn, District of Columbia.

Electrical Engineer.

Frank Bailey Steele, West Virginia.

Graduate from Virginia Military Institute.

Master of Science.

Frances Sanders, District of Columbia.

B.S., 1901, Columbian University.

Master of Arts.

Edward Damon Baldwin, Oregon.

B.L., 1906, Whitman College.

Doctor of Philosophy.

William Clifton Phalen, Massachusetts.

S.B., 1899, S.M., 1900, Massachusetts Institute of Technology.

Bachelor of Laws.

John Edward Biscoe, District of Columbia.

Graduate from Virginia Military Institute, 1904.

Bruce Randall Kester, Pennsylvania.

Harry Earl Leach, California.

Master of Patent Law.

Carl A. Richmond, Illinois.

Master of Laws.

Ralph Marshall Hattersley, Ohio.

LL.B., 1907, The George Washington University.

DEGREES CONFERRED AT COMMENCEMENT, 1909.**HONORARY.****Doctor of Laws.**

Rear-Admiral Charles H. Stockton, U.S.N.

Doctor of Divinity.

Ulysses Grant Baker Pierce, District of Columbia.

IN COURSE.**Doctor of Philosophy.**

Harry Wilson Houghton, Maryland.

B.S. in Chemistry, 1906, M.S., 1907, The George Washington University.

George Whitfield Stiles, Jr., Oklahoma.

B.S., 1900, Oklahoma Agricultural and Mechanical College.

M.D., 1905, The George Washington University.

Luther Hess Waring, Pennsylvania.

B.A., 1905, The George Washington University.

M.A., 1904, Columbian University.

Master of Arts.

Frank Coy Allis, New York.

LL.B., 1903, Cornell University.

LL.M., 1906, A.B., 1908, The George Washington University.

George Morton Churchill, Massachusetts.

A.B., 1896, Boston University.

Selden Marvin Ely, District of Columbia.

LL.B., 1894, LL.M., 1895, B.A., 1908, The George Washington University.

Marian Adams Gudmunson, Idaho.

A.B., 1903, University of Utah.

Stephen Elliott Kramer, District of Columbia.

B.S., 1906, The George Washington University.

Albert Nin-Frias, Uruguay.

B.A.S., 1907, Montevideo University.

Hans Fr. Arthur Schoenfeld, District of Columbia.

B.A., 1907, The George Washington University.

William Spring Stevens, Maine.

A.B., 1906, Colby College.

Daniel Michael Walsh, Vermont.

B.S., 1904, University of Vermont.

James Owens Wrightson, District of Columbia.

A.B., 1909, The George Washington University.

Julia Elektra Ludlow Young, New York.

B.A., 1906, Barnard College, Columbia University.

Master of Science.

Everett William Boughton, New York (in absentia).

B.S. in Chemistry, 1903, Polytechnic Institute of Brooklyn.

Alton Lewin Kibler, Virginia.

A.B., 1904, Randolph-Macon College.

Otis Dow Swett, Maryland.

LL.B., 1891, LL.M., 1892, Columbian University.

B.S., 1904, The George Washington University.

Electrical Engineer.

Hayner Haskell Gordon, Ohio.

B.S. in C.E., 1908, The George Washington University.

Bachelor of Arts.

Vera Elsie Adams, District of Columbia.

(With distinction.)

Charles Raymond Atkinson, Wyoming.

James William Berry, District of Columbia.

Charles Harvey Bowker, District of Columbia.

M.D., Hahnemann Medical College.

National University Medical School.

Lilian Claire Cash, District of Columbia.
 Christine Merrick Church, District of Columbia.
 Ruth Gilbert Cochran, Colorado.
 May Thacher Cooke, Colorado.
 Marion Edith Craig, Pennsylvania.
 (With distinction.)

William Joseph Francis Curran, Virginia.
 Howard G. England, District of Columbia.
 Maryland Divinity School.

Anne Lee Ettenger, Indiana.
 Frank Orear Everett, Missouri.
 Charlotte Raynsford Farrington, Minnesota.
 Mildred Floyd Johnston, District of Columbia.
 Lillie V. Keathley, North Carolina.
 James Luther Martin, Maryland.
 1904, Theological Seminary in Virginia.

Tench Tilghman Marye, District of Columbia.
 Yale O. Millington, District of Columbia.
 Roy Lyman Joseph Newhouser, Pennsylvania.
 Edgar Cordell Powers, District of Columbia.
 Henry N. Sisco, District of Columbia.

Bachelor of Arts and Teacher's Diploma.

Alice Sinclair Botkin, District of Columbia.
 May Paul Bradshaw, District of Columbia.
 Victoria Briggs, New York.
 Edith Lee Compton, District of Columbia.
 Henry White Draper, District of Columbia.
 LL.B., 1903, LL.M., 1904, National University.
 Margaret Newton, District of Columbia.

Teacher's Diploma.

Ruth Fowler.
 B.A., 1908, University of Indiana.

Bachelor of Science.

Nellie Ecker Besselièvre, District of Columbia.
 Mary Cecilia Breen, District of Columbia.
 Joseph Ryland Curl, District of Columbia.
 Franz Frederick W. Dahn, Minnesota.
 Laura Shackelford, District of Columbia.
 Sidney Forsythe Sherwood, Virginia.

Bachelor of Science in Civil Engineering.

Raymond Edmond Adams, Pennsylvania.

Max W. Winter, Nebraska.

Bachelor of Science in Electrical Engineering.

Ara Marcus Daniels, District of Columbia.

George Winship Easterday, District of Columbia.

William Frederick Nickel, Maryland.

Harold Brooke Stabler, Maryland.

Philip H. Ward, Jr., District of Columbia.

Bachelor of Science in Mechanical Engineering.

Kemp Gerard Acker, District of Columbia.

Doctor of Medicine.

James Joseph Lester Brooks, Pennsylvania.

Sidney Lovett Chappell, District of Columbia.

Albert Patton Clark, District of Columbia.

Phar.D., 1905, National College of Pharmacy.

James Cleveland Collins, Virginia.

Rush West Conklin, Kansas.

Clarence Christian Craft, South Carolina.

B.S., 1902, South Carolina Military Academy.

Charles Hardy Fair, Virginia.

Sanford Williams French, New York.

David Thomas Gochenour, Virginia.

B.S., 1900, Bridgewater College.

Clarence Herbert Griffin, Massachusetts.

B.S., 1904, Massachusetts Agricultural College.

William Parker Herbst Habel, Pennsylvania.

Phar.D., 1905, National College of Pharmacy.

John Emery Hastings, New York.

John Joseph Hoey, Rhode Island.

William Russell Jobson, Pennsylvania.

Edgar Percy Keneipp, Illinois.

George Fred Klugh, South Carolina.

B.S., 1901, Clemson Agricultural College.

John Edward Lind, District of Columbia.

Douglas Wiltz McEnery, Louisiana.

B.A., 1903, Tulane University.

Frederick W. McKnight, Ohio.

William Frank McLaughlin, Pennsylvania.

Howard William Neail, New York.

Samuel Boyce Pole, Jr., District of Columbia.

Robert Llewellyn Powell, Virginia.
Benjamin Rush Rhees, District of Columbia.
Laurence Joseph Simonton, Indiana.
Henry Nathaniel Sisco, District of Columbia.
A.B., 1898, Battle Creek College.
Samuel Jay Turnbull, Florida.
Frederick Walter Vasenius, Finland.
George Leo Weiler, Utah.
Richard Charles Weithas, New York.
Gershom Franklin White, Ohio.
B.S., 1901, Ohio University.
Ph.D., 1905, Cornell University.
John Mitchell Willis, West Virginia.
William Pleasant Wood, Ohio.

Doctor of Dental Surgery.

Guy Wilson Angelo, Virginia.
William Harry Barnhard, Ohio.
Ewing Marvin Wood Bear, District of Columbia.
Claude Quayle Cannon, Utah.
Albert Sidney Davidson, District of Columbia.
Max S. Goldberg, District of Columbia.
Charles Rufus Irby, Virginia.

Doctor of Pharmacy.

Ray T. Bailey, Jr., District of Columbia.
T. Quinn Jones, Missouri.
E. V. Payne, Virginia.
Chauncey C. Reese, Maryland.
Irene Nellie Richardson, District of Columbia.

Master of Laws.

Raphael Henry Blakesley, California.
LL.B., 1908, University of Southern California.
George Amory Maddox, Maryland.
A.B., 1896, A.M., 1899, St. John's College.
LL.B., 1899, University of Maryland.
José Abad Santos y Basco, Philippine Islands.
LL.B., 1908, Northwestern University.

Master of Patent Law.

Arthur William Davidson, Ohio.
B.A., 1899, Western Reserve University.
LL.B., 1908, The George Washington University.

- John Alexander Ferguson, Michigan.
LL.B., 1908, National University.
- Nelson A. Hallauer, New York.
LL.B., 1908, National University.
- William Abbott Hardy, Massachusetts.
LL.B., 1908, National University.
- Joseph William Harris, Pennsylvania.
LL.B., 1908, National University.
- Walter Frisby Hendricks, Tennessee.
LL.B., 1907, LL.M., 1908, National University.
- Charles Popham Hidden, New York.
M.E., 1897, Stevens Institute of Technology.
LL.B., 1908, National University.
- Charles Gwinn Jarboe, Maryland.
A.B., 1896, A.M., 1901, St. John's College.
LL.B., 1908, National University.
- Nelson Josiah Jewett, Michigan.
LL.B., 1908, Georgetown University.
- George Bayard Jones, District of Columbia.
B.S., 1905, Massachusetts Institute of Technology.
LL.B., 1908, The George Washington University.
- Hugh Keneipp, Illinois.
LL.B., 1901, University of Michigan.
- Clarence Orson McKay, Michigan.
LL.B., 1908, National University.
- Forrest Burleigh MacNab, Massachusetts.
LL.M., 1907, National University.
- John Molloy, Maryland.
LL.B., 1906, LL.M., 1907, Georgetown University.
- Lawrence Sands Paddock, New Jersey.
LL.B., 1908, National University.
- Willard Lacy Pollard, Illinois.
LL.B., 1909, National University.
- John Goodwin Powell, Virginia.
LL.B., 1908, National University.
- Clifford Alonzo Rowley, District of Columbia.
LL.B., 1909, National University.
- William David Shoemaker, Maryland.
LL.B., 1909, Washington College of Law.
- Warren Harvey Small, Massachusetts.
A.B., 1905, Harvard University.
- John Preston Tarbox, South Carolina.
B.A., 1904, Clemson College.
LL.B., 1908, National University.

Titus Ulke, District of Columbia.

E.M., 1899, Royal Academy of Mines, Freiberg, Saxony.

LL.B., 1908, B.S., 1909, The George Washington University.

Charles Franklin Willard, Massachusetts.

B.S., 1901, Massachusetts Institute of Technology.

J.B., 1906, J.M., 1907, Boston University.

Ira Jay Wilson, Wisconsin.

LL.B., 1908, The George Washington University.

Bachelor of Laws.

Thomas Berton Adams, Florida.

B.A., 1902, University of Nashville.

George Lewis Ambrose, Montana.

Burton Hack Barndollar, Pennsylvania.

Octave Adelbert Bigoness, District of Columbia.

John Levi Cable, Ohio.

L.B., 1906, Kenyon College.

Chester Morrow Clark, District of Columbia.

A.B., 1907, Harvard University.

Harry Seymour Cragin, District of Columbia.

(With distinction.)

Robert Duff Dalzell, Pennsylvania.

A.B., 1905, Yale University.

Roi De Lancy, Ohio.

B.A., 1908, The George Washington University.

Frank Eugene Edgerton, Nebraska.

A.B., 1900, University of Nebraska.

George Irving Haselton, New Hampshire.

Errol Osman Horner, New Jersey.

Wells Aleck Hutchins, District of Columbia.

(With distinction.)

Warren Maxwell Jenkins, Pennsylvania.

(With distinction.)

A.B., 1906, Grove City College.

John Jensen, Utah.

(With distinction.)

B.A., 1906, University of Utah.

George Hickman Koons, Indiana.

Robert Lee Lawburgh, Indiana.

A.M., 1905, De Pauw University.

Albert Lafayette Lohm, West Virginia.

Richard Dunnica Micou, Virginia.

B.A., 1903, M.A., 1903, University of Virginia.

Walter Karl Miller, Kansas.

Jesse Ray Nyemaster, Iowa.

Philip De Witt Phair, Maine.

M.A., 1906, Harvard University.

Sidney Roche, District of Columbia.

Paul Allison Stuart, Pennsylvania.

A.M., 1906, Washington and Jefferson College.

Harold J. Wagner, New York.

Roscoe Everett Whiting, Washington.

(With distinction.)

A.B., 1901, Bowdoin College.

Bachelor of Law.

Thomas Mador Gilmore, Jr., Kentucky.

John Albert Homer, Utah.

Lewis Meriam, Massachusetts.

A.B., 1905, A.M., 1906, Harvard University.

Harry Hamlin Pearce, Michigan.

A.B., 1905, Albion College.

Harold Augustus Swenarton, New Jersey.

Ph.B., 1905, Yale University.

Doctors of Philosophy.

During the years 1894 to 1907, inclusive, the University has conferred the degree of Doctor of Philosophy, after examination and the presentation and public defense of a thesis, upon the following persons:

1894.

- *Edward Farquhar, (Greek)
 Thesis: Elements of Unity in the Homeric Poems. (Conservative Review, vol. iii, June-September, 1900.)
- Walter Scott Harshman, (Theoretical Astronomy)
 M.S., 1892, Columbian University.
 Thesis: Investigation of the Motion of the Pericentre of Deimos. (Astronomical Journal, Boston, vol. xiv, pp. 145-148, 1894.)
- Professor Frank Hall Knowlton, (Botany)
 B.S., 1884, M.S., 1887, Middlebury.
 Thesis: The Flora of the Laramie Group and Allied Formations. (Not published.)
- Claude Augustus Oscar Rosell, (Chemistry)
 M.A., 1881, University of Pennsylvania; LL.B., 1886, Georgetown University.
 Thesis: Investigation of the Properties of Ferric Acid. (J. Am. Chem. Soc., vol. xvii, pp. 760-769, 1895.)

1895.

- George Wesley Hamner, (History)
 B.A., 1882, M.A., Hiawassee College; LL.B., 1885, University of Alabama; LL.M., 1886, Georgetown University.
 Thesis: Researches upon the Government of the Creek Indians. (Not published.)

1896.

- Edward Clarke Hudson, (Greek)
 B.A., 1884, M.A., 1894, Hiawassee College; M.A., 1894, Columbian University.
 Thesis: Investigation into the Use of the Genitive Case in Greek. (Not published.)
- Rev. James Stephen Lemon, (Psycho-physics)
 B.A., 1864, M.A., 1867, Wesleyan University, Middletown, Conn.
 Thesis: The Skin Considered as an Organ of Sensation. (Published separately, 1898, 70 pp.)

1897.

- Professor Charles Arthur Hollick, (Palæobotany)
 Ph.D., 1879, Columbia College.
 Thesis: Palæobotany of the Yellow Gravel at Bridgeton, N. J. (Not published.)

* Deceased.

John Scott Johnson, (Philosophy)
 B.S., 1893, M.A., 1894, Columbian University.
 Thesis: The Influence of French Thought on the Formation of the Constitution of the United States. (Not published.)

Timothy William Stanton, (Palæontology)
 B.S., 1883, M.S., 1895, University of Colorado.
 Thesis: A Comparative Study of the Lower Cretaceous Formation and Faunas of the United States. (Jour. of Geology, pp. 1-49, September-October, 1897.)

1898.

*Cabell Whitehead, (Chemistry)
 B.M., 1885, Lehigh University; M.S., 1895, Columbian University.
 Thesis: A Study of the Tellurides; Their Formation and Chemical Properties. (G. W. U. Bull., 5 [4], 65-68, 1906.)

1900.

Eugene A. Byrnes, (Physical Chemistry)
 B.A., 1884, Michigan University; LL.B., 1887, LL.M., 1888, Columbian University.
 Thesis: Experiments on the Direct Conversion of the Energy of Carbon into Electrical Energy. (1, "Voltaic Cells with Fused Electrolytes"; 2, "Notes on Metallic Diaphragms." Trans. Amer. Electrochemical Society. Vol. 2, pp. 113-121. Vol. 4, p. 135.)

Rev. Benjamin Alfred Dumm, (Philosophy)
 B.A., 1886, M.A., 1889, Western Maryland College.
 Thesis: The Concept of Self in the Analysis of Experience. (Not published.)

Professor Charles Russell Ely, (Chemistry)
 A.B., 1891, A.M., 1897, Yale College.
 Thesis: Investigation of the Phenomenon of Deliquescence and the Capacity of Salts to Attract Water Vapor. (G. W. U. Bull., 5 [4], 69-74, 1906.)

Ernestine Fireman, (Chemistry)
 M.S., 1898, Columbian University.
 Thesis: The Action of Phosphonium Iodide on Tetra and Penta Chlorides. (Am. Chem. Jour., 30, 116-133, 1903.)

Charles Moore, (American History)
 A.B., Harvard; M.A., 1898, Columbian University.
 Thesis: The Northwest under Three Flags. (Published separately by Harper & Bros., New York, 1900, 402 pp.)

1901.

William Hamilton, (American History)
 B.A., 1891, Moravian College, Pennsylvania; M.A., 1894, Columbian University.
 Thesis: The Expansion of Russia to the Eastward. (Not published.)

Chohei Shirasu, (Economics)
 Graduate, 1893, Doshisha University, Japan; A.M., 1899, Yale University.
 Thesis: The Development of Commerce in Japan and its Effect on Civilization. (Summary of Commerce and Finance for December, 1901, Bureau of Statistics, U. S. Treasury Department, pages 2227-2315.)

1902.

Rev. Frank Leighton Day, (Anthropology)
B.A., 1891, M.A., 1896, Roanoke College; B.D., 1895, Vanderbilt University.

Thesis: Did the Semites Pass through a Totem Stage? (Not published.)

Nevil Monroe Hopkins, (Chemistry)

B.S., 1899, M.S., 1900, Columbian University.

Thesis: Some Experiments on Electrolytic Conductivity with Reference to the Ionic Theory. (G. W. U. Bull., 3 [3], 91-94, 1904.) (Published separately as "Experimental Electrochemistry," by D. Van Nostrand Company, New York, 1905, 284 pp., 231 ill.)

1903.

Edwin Allston Hill, (Chemistry)
A.B., 1875, A.M., 1902, Yale University; M.S., 1901, Columbian University.

Thesis: The Constitution of Certain Halogen Oxyacids as inferred from Thermochemical Data. (G. W. U. Bull., 3 [4], 94-103, 1904.)

William Mather Lamson, (Architecture)

B.S., 1897, C.E., 1899, Columbian University.

Thesis: Iron and Steel Domes. (Not published.)

Thomas Malcolm Price, (Biochemistry)

B.S., Maryland Agricultural College; M.S., 1900, Columbian University.

Thesis: The Influence of Varying Strength Solutions of Formaldehyde on some of the Enzymes of Animal Origin. (G. W. U. Bull., 3 [4], 104-108, 1904.)

Harriet Richardson, (Zoölogy)

A.B., 1896, A.M., 1901, Vassar College.

Thesis: Contributions to the Natural History of the Isopoda. (Proc. U. S. Nat. Museum, 27, 1-89, 1904, and Bull. U. S. Fish Com., pp. 47-54, Sept. 17, 1903.)

1904.

William Macon Coleman, (History)

A.B., 1858, A.M., 1892, University of North Carolina.

Thesis: A Refutation of Mommsen's Theory on Cæsar's Agrarian Policy. (Not published.)

Frank Van Vleck, (Mechanical Engineering)

M.E., 1884, Stevens' Institute of Technology.

Thesis: Improvements in Ship Construction. (Not published.)

Andrew Wilson, (American History)

B.S., 1885, B.O., 1886, B.A., 1886, M.A., 1890, Kansas Normal College; LL.B., 1890, LL.M., 1891, Georgetown University; M.L., 1892, D.C.L., 1893, Yale University.

Thesis: Influence of John Marshall on the Political History of the United States. (Not published.)

1905.

Ray Smith Bassler, (Palæontology)

B.A., 1902, University of Cincinnati; M.S., 1903, The Columbian University.

Thesis: A Study of the James Types of Ordovician and Silurian Bryozoa. (Proc. U. S. Nat. Museum, xxx, 1906, 1-66, pls. I-IV.)

- Hiram Colver McNeil, (Chemistry)
 B.S., 1896, M.S., 1899, Denison University.
 Thesis: On the Constitution of Certain Natural Silicates. (G. W. U. Bull., 4 [3], 76-79, 1905.) (Journal American Chemical Society [28], 590-602, 1906.)
- Henry Albert Pressey, (Hydraulic Engineering)
 B.S., 1893, The Columbian University; B.S., 1896, Massachusetts Institute of Technology.
 Thesis: Flow of Water in Channels. (Not published.)
- Warren Waverley Phelan, (Comparative Jurisprudence)
 B.A., 1894, M.A., 1896, Columbia University.
 Thesis: An Historical Sketch of the Criminal Law of Louisiana from the Founding of the Colony to the Establishment of the State. (Not published.)

1906.

- Cornelius Lott Shear, (Botany)
 B.S., 1896, M.S., 1900, University of Nebraska.
 Thesis: Cranberry Diseases. (G. W. U. Bull., 5 [4], 75-78, 1906. Bulletin 110, Bureau of Plant Industry, U. S. Department of Agriculture, 1907.)
- Martin Norris Straughn, (Agricultural Chemistry)
 B.S., 1899, Maryland Agricultural College; M.S., 1902, Columbian University.
 Thesis: The Chemistry of Different Varieties and Individual Ears of Sweet Corn as Affected by Enzymes, Climatic Conditions, and Breeding. (Bulletin 120, Maryland Agricultural Experiment Station, 1907.)

1907.

- Rev. George Brodthage, (Germanics)
 Universities of Strasburg, Berlin and Göttingen.
 Thesis: Germanentum, Gottmenschentum. (G. W. U. Bull., 6 [3], 82-86, 1907.)
- Frederick Warren Grover, (Physics)
 B.S., 1899, Massachusetts Institute of Technology; M.S., 1901, Wesleyan University, Connecticut.
 Thesis: Simultaneous Measurement of the Capacity and Power Factor of Condensers. (G. W. U. Bull., 6 [3], 92-95, 1907. Bulletin of the Bureau of Standards, May 23, 1907, Reprint No. 64, pp. 371-431.)
- Edward Elliott Richardson, (Philosophy)
 B.S., 1904, M.D., 1895, M.S., 1905, George Washington University.
 Thesis: Mechanism and Teleology. (G. W. U. Bull., 6 [3], 87-91, 1907.)
- Rabbi Abram Simon, (Philosophy)
 1894, Cincinnati Hebrew Union College; B.L., 1894, University of Cincinnati.
 Thesis: The Constructive Character and Function of Religion in Human Progress as Illustrated by the Religion of Israel. (Not published.)
- Walter Otheman Snelling, (Chemistry)
 B.S. in Chemistry, 1904, Columbian University; B.S. in General Science, 1905, Harvard University; M.S., 1906, Yale University.
 Thesis: Contributions to the Knowledge of Tellurium. (Not published.)

Warner W. Stockberger, (Botany)
B.S., 1902, Denison University.

Thesis: The Effect of Certain Toxic Solutions on Nuclear and Cell Division
in Root Tips of *Vicia Faba*. (Not published?)

Frank Cummings Cook, (Chemistry)

B.A., 1900, M.A., 1902, M.S., 1904, Yale University.

Thesis: Phosphorus Metabolism Experiments. (Not published.)

1908.

Clara Southmayd Ludlow, (Preventive Medicine)

B.S., 1900, M.S., 1901, A. and M. College, Mississippi.

Thesis: The Mosquitoes of the Philippine Islands. The distribution of certain species and their occurrence in relation to the incidence of certain diseases. (Published separately, Washington, D. C., 1908, 65, pp.)

Benjamin George Wilkinson, (History)

B.A., 1897, University of Michigan; M.A., 1905, Union College.

Thesis: The Overthrow of the Concordat by the Third Republic. (Not published.)

1909.

William Clifton Phalen, (Geology)

S.B., 1899, S.M., 1902, Massachusetts Institute of Technology.

Thesis: Economic Geology of the Kenova Quadrangle in Kentucky, Ohio and West Virginia. (Bulletin 349, U. S. Geological Survey.)

Harry Wilson Houghton, (Biochemistry)

B.S. in Chemistry, 1906, M.S., 1907, The George Washington University.

Thesis: The Effect of Cold Storage on Chicken Meat. (Not published.)

George Whitfield Stiles, Jr. (Preventive Medicine)

B.S., 1900, Oklahoma Agricultural and Mechanical College; M.D., 1905, The George Washington University.

Thesis: The Possibility of Shellfish Contamination from Sewage-Polluted Waters. (Not published.)

Luther Hess Waring, (Germanics)

B.A., 1905, The George Washington University; M.A., 1904, Columbian University.

Thesis: Martin Luther's Political Reforms of Germany. (Not published.)

Associations, Boards and Committees.

ALUMNI ASSOCIATIONS.

THE GENERAL ASSOCIATION.

Officers, 1908-1909.

President.

EDWIN C. BRANDENBURG.

Vice-Presidents.

CLARENCE W. DEKNIGHT,
DR. H. H. DONNALLY,
SELDEN M. ELY,

J. WILMER LATIMER,
DR. D. OLIN LEECH,
LEM TOWERS, JR.

Secretary.

HOWARD L. HODGKINS.

Treasurer.

JOHN B. LARNER.

Executive Committee.

EDWIN C. BRANDENBURG, Chairman.

HOWARD L. HODGKINS, Secretary.

DR. GEORGE N. ACKER,
DR. JOHN H. BURCH,
DR. JOHN W. CHAPPELL,
MYER COHEN,
CLARENCE W. DEKNIGHT,
DR. H. H. DONNALLY,
SELDEN M. ELY,
JOHN W. HOLCOMBE,

DR. A. BARNES HOOE,
JOHN B. LARNER,
J. WILMER LATIMER,
DR. D. OLIN LEECH,
EDWARD G. PORTNER,
WILLIAM H. SINGLETON,
DR. HENRY C. THOMPSON,
LEM TOWERS, JR.,

HENRY F. WOODARD.

PUGET SOUND ALUMNI ASSOCIATION.

President.

DR. KENNETH TURNER.

Vice-President.

H. T. GARRETSON.

Secretary and Treasurer.

CHARLES A. SPIRK,

414 New York Block, Seattle, Wash.

COLORADO ALUMNI ASSOCIATION.

President.

CLARENCE A. BRANDENBURG.

Secretary and Treasurer.

PAUL M. CLARK,

Symes Building, Denver Colo.

SALT LAKE CITY ALUMNI ASSOCIATION.

President.

DR. WILLIAM F. BEER.

Secretary.

CULBERT L. OLSON.

Treasurer.

I. E. WILLEY.

1121 Boston Building, Salt Lake City, Wash.

NEW YORK ALUMNI ASSOCIATION.

President.

FRITZ V. BRIESEN.

Secretary.

OLIVER C. CARPENTER,

141 Broadway, New York City.

Since its organization in 1821, the University has conferred 7293 degrees upon 5836 persons.

The Secretary of the General Alumni Association, whose office is at the University, endeavors to keep a list of the addresses of all Alumni. His catalogue now contains the addresses of about 4000 graduates. It is known that about 1200 are dead, and information is lacking in regard to the others. All Alumni are urged to keep the Secretary informed of any change of address or occupation, and to supply information in regard to their fellow Alumni.

THE COLUMBIAN WOMEN.

President.

MRS. JOHN PAUL EARNEST.

First Vice-President.

MRS. GEORGE OTIS SMITH.

Second Vice-President.

MRS. GEORGE P. MERRILL.

Corresponding Secretary.

MISS MARGARET WHITE.

Recording Secretary.

MISS M. A. CLANCY.

Treasurer.

MISS ANNA S. HAZELTON.

Historian.

MISS JULIA V. MCCORD.

BOARD OF LADY MANAGERS OF THE
UNIVERSITY HOSPITAL.*President.*

MRS. CHARLES E. MUNROE.

First Vice-President.

MRS. E. B. ROSA.

Second Vice-President.

MRS. J. H. CRAWFORD.

Corresponding Secretary.

MRS. PERCY ASH.

Recording Secretary.

MRS. L. H. REICHELDERFER.

Treasurer.

MRS. S. E. LEWIS.

THE GEORGE WASHINGTON UNIVERSITY
MEDICAL SOCIETY.*President.*

W. P. CARR, M.D.

Vice-President.

D. W. PRENTISS, M.D.

Secretary.

W. J. FRENCH, M.D.

Treasurer.

E. G. SEIBERT, M.D.

COMMITTEE ON PUBLICATIONS.

Chairman.

PROFESSOR WILBUR.

PROFESSOR HODGKINS,

PROFESSOR VANCE,

SECRETARY OF THE UNIVERSITY.

COMMITTEE ON PUBLICITY.

PROFESSOR CARROLL, *Chairman*,

SECRETARY OF THE UNIVERSITY.

ASSOCIATION OF CLASS PRESIDENTS.

President.

HARRY WILSON HOUGHTON, PH.D.

UNIVERSITY HATCHET.

Editor-in-Chief.

E. P. GATES.

Assistant Editor.

DAVID A. BAER.

Business Manager.

FRANK C. ALLIS.

Assistant Manager.

J. BALLARD MOORE.

CHERRY TREE.

Editor-in-Chief.

WILLIAM C. VAN VLECK.

Business Manager.

LOREN H. CALL.

STUDENTS UNION.

President.

LOREN H. CALL.

Vice-President.

ERNEST F. WENDEROTH.

THE ATHLETIC COUNCIL.

Faculty.

PROFESSOR EARNEST,

ASST. PROFESSOR JAMES F. PEAKE,

SECRETARY OF THE UNIVERSITY.

Alumni.

DR. G. N. ACKER,

H. L. BRIGHT,

H. P. BLAIR,

DR. W. F. R. PHILLIPS.

DR. E. C. WILSON.

Students.

W. A. SOMMERS,

C. C. LAMBERT,

D. R. COVELL,

D. A. BAER,

R. L. NEWHOUSER,

H. N. CLAGETT.

INTERCOLLEGIATE DEBATING COUNCIL.

Faculty.

PROFESSOR LORENZEN.

Alumni.

J. W. LANGLEY,

H. F. WOODARD.

Students.

J. T. KENNEDY,

E. P. GATES.

COMMITTEE ON THE LIBRARY.

Chairman.

ASSISTANT PROFESSOR SCHMIDT.

PROFESSOR SWISHER,

PROFESSOR ASH,

PROFESSOR CARROLL,

PROFESSOR HOUGH.

DIRECTORY

OF

OFFICERS OF GOVERNMENT, ADMINISTRATION, AND INSTRUCTION.

The bracketed references following the names indicate the offices and faculty memberships held. Following is the explanation of the abbreviations used, the numbers indicating the pages of the catalogue on which may be found the full name, degrees, and titles of the officers: G. S., Faculty of Graduate Studies, 21; U. S., Faculty of Undergraduate Studies, 29; L., Department of Law, 120; M., Department of Medicine, 138; D., Department of Dentistry, 171; P., National College of Pharmacy, 183; V., College of Veterinary Medicine, 189.

ABBE, T. [M., 144]	1819 M St	CHURCHILL, G. M. [U. S., 30]	
ABBOT, H. L. [G. S., 22]			118 5th St, S E
	2013 Kalorama Ave	CLARK, F. W. [G. S., 21]	Cosmos Club
ACKER, G. N. [M., 138]	913 16th St	CLAYTOR, T. A. [M., 139]	
ANDERSON, T. H. [Trustee, Corp., 4]			1315 New Hampshire Ave
	1531 New Hampshire Ave	CLEPHANE, W. C. [L., 120]	
ASH, P. [G. S., 22]	1620 Riggs Pl		1747 Corcoran St
BARNES, N. P. [M., 143]		COHEN, L. [G. S., 22]	
	212 Maryland Ave, N E		Bureau of Standards
BARTSCH, P. [G. S., 52]		COLLINS, W. P. [V., 189]	
	Smithsonian Institution		630 H St, S W
BASSETT, C. T. [D., 171]	1409 L St	CONKLIN, C. B. [M., 145]	1342 R St
BASSLER, R. S. [U. S., 30]		COOPER, A. B. [D., 171]	817 14th St
	National Museum	COPELAND, E. P. [M., 143]	
BETTS, P. [G. S., 22]	The Oakland		The Rockingham
BIBB, A. B. [U. S., 29]	2015 19th St	CROISSANT, D. C. [G. S., 22]	
BIGELOW, F. H. [G. S., 22]			821 North Carolina Ave
	1625 Massachusetts Ave	DAVIS, H. C. [Secretary, 6]	
BIRTWELL, D. T. [M., 145]	2719 14th St		1006 Massachusetts Ave
BLACKBURN, I. W. [M., 139]		DE CAINDRY, W. A. [Auditor, 4]	
	Government Hospital for Insane		914 17th St
BLAIR, H. P. [L., 120]	Colorado Bldg	DE FARGES, J. R. [D., 171]	1223 Vt Ave
BORDEN, W. C. [Dean, M., 140]		DENNIS, W. C. [L., 120]	State Dept
	911 16th St	DONNALLY, H. H. [M., 142]	
BOVEE, J. W. [M., 139]	The Rochambeau		1018 14th St
BRADBURY, H. M. [P., 183]	1304 Park Rd	DUCKETT, W. G. [Trustee, P., 5]	
BRADBURY, W. H. [Trustee, P., 5]			2148 Pennsylvania Ave
	1304 Park Rd	DULANEY, H. R. [Trustee, V., 5]	
BRANDENBURG, E. C. [L., 120]	344 D St		1320 F St
BRANDENBURG, W. R. [M., 142]		DUNSTAN, E. V. [G. S., 22]	
	2335 18th St		111 12th St, S E
BREWER, D. J. [12]	1923 16th St	DYE, H. S. [M., 144]	1406 L St
BROWN, E. E. [12]	The Richmond	EARNEST, J. P. [L., 120]	2123 N St
BUCKINGHAM, D. E. [V., 189]		EASTERDAY, H. C. [Trustee, P., 5]	
	2113 14th St		101 G St
BUCKINGHAM, E. [G. S., 22]		EDSON, J. J. [Trustee, Corp., 4]	
	Bureau of Standards		1324 16th St
BUHRMAN, A. G. [L., 120]		EICHORN, A. [V., 189]	1415 Monroe St
	Clerk's Office, City Hall	ELLIOTT, H. R. [M., 142]	The Maury
BUTLER, C. S. [M., 158]	1333 Harvard St	ELLIS, H. S. [Dean of Women, 29]	
BUTLER, W. K. [M., 140]	1207 M St		1538 I St
CABELL, J. M. [M., 141]		EUSTIS, W. C. [Trustee, V., 5]	
	The Rochambeau		1611 H St
CAMPBELL, C. B. [Trustee, P., 5]		FLEMER, L. [Trustee, Corp., 4]	
	1668 Park Rd		701 Maryland Ave, N E
CARMICHAEL, R. B. [M., 140]	818 17th St	FLEMING, W. H. I. [12]	
CARROLL, M. [G. S., 21]	Cleveland Pk		1847 Wyoming Ave
CASTELL, L. B. [P., 183]	3100 11th St	FLOYD, H. B. [P., 183]	1016 Mass. Ave
CHARLTON, P. [12]	1712 H St	FORMAD, R. J. [V., 189]	719 12th St
CHURCH, M. [L., 120]	1608 20th St	FOSTER, J. W. [12]	1323 18th St

- FOWLE, F. E. [12] Smithsonian Institution
 FRANKLAND, W. A. [M., 143] 1300 Massachusetts Ave
 FRANKLIN, E. T. M. [M., 144] 1315 19th St
 FRANZ, S. I. [G. S., 22; M., 140] Government Hospital for Insane
 FREMONT-SMITH, F. [M., 142] 1808 Massachusetts Ave
 FRENCH, W. J. [M., 144] 1736 18th St
 FULLER, H. G. [M., 145] 1725 N St
 GALLAUDET, E. M. [Trustee, Corp., 4] Kendall Green
 GILL, T. N. [G. S., 21] Cosmos Club
 GORE, J. H. [G. S., 21] 2210 R St
 GRADY, J. W. [P., 183] 9th and N Sts
 GREENE, S. H. [Trustee, Corp., 4] 1320 Q St
 GREENE, JR., S. H. [M., 143] The Burlington
 HAGAN, J. R. [D., 171] 1502 H St
 HAGNER, F. R. [M., 139] 1725 N St
 HALL, A. [G. S., 22] Naval Observatory
 HALL, A. V. [V., 189] 2115 14th St
 HALL, J. A. T. [Trustee, V., 5] 1833 V St
 HAMILTON, W. [12] 1335 Conn. Ave
 HARLAN, J. M. [L., 120] 14th and Euclid Pl
 HARLAN, R. D. [4] 1310 Conn. Ave
 HARPER, R. N. [P., 183] 469 C St
 HARRISON, M. E. [D., 171] The New Berne
 HART, G. H. [V., 189] 2113 14th St
 HASSAL, A. H. [V., 189] Bowie, Md
 HEINECKE, G. B. [M., 144] 1728 20th St
 HENNING, G. N. [G. S., 21] 1728 20th St
 HENRY, F. C. [Trustee, Corp., 5] 703 15th St
 HILL, D. J. [8] Minister to the Netherlands
 HILL, E. A. [G. S., 22] 1221 K St
 HILLEBRAND, W. F. [P., 183] 506 T St
 HILTON, S. I. [Trustee, P., 5] 22d and L Sts
 HODGKINS, H. L. [Dean, 6] 1830 T St
 HOEHLING, JR., A. A. [L., 120] 1416 F St
 HOLMES, C. W. [Treasurer, 4] G. W. U.
 HOLTON, F. A. [P., 183] 2125 S St
 HOPKINS, N. M. [G. S., 22] 2128 Bancroft Pl
 HOUGH, W. S. [Dean, 6] Stoneleigh Ct
 HOWARD, B. J. [P., 183] 1366 North Carolina Ave, N E
 HUNT, A. L. [M., 144] The Burlington
 HUNT P. G. [M., 145] 1815 M St
 HYDE, C. W. [M., 144] The Plymouth
 JACKSON, V. B. [M., 145] 1332 I St
 JENNINGS, H. [Trustee, Corp., 4] 2221 Massachusetts Ave
 JONES, E. B. [M., 145] G. W. U.
 KALUSOWSKI, H. E. [Trustee, P., 5; Dean, 6] 808 I St
 KELLEY, J. T. [M., 143] 1312 15th St
 KEMBLE, A. [M., 145] The Cecil
 KERN, R. R. [U. S., 30] G. W. U.
 KEY, S. [M., 145] 1716 H St
 KING, A. F. A. [M., 138] 1315 Massachusetts Ave
 KINYOUN, J. J. [M., 140] 1423 Clifton St
 KRAMER, S. E. [12] 1318 S St
 LARNER, J. B. [Trustee, Corp., 4] Washington Loan & Trust Bldg
 LATIMER, J. W. [L., 120] Fendall Bldg
 LAWRENCE, W. F. [D., 171] 825 Vt. Ave
 LAWSON, H. W. [M., 140] 1520 9th St
 LEVERING, E. [Trustee, Corp., 4] Baltimore, Md
 LEWIS, D. G. [M., 143] 1311 14th St
 LISNER, A. [Trustee, Corp., 4] 1723 Massachusetts Ave
 LOCKWOOD, J. [V., 189] 910 1st St
 LORENZEN, E. G. [L., 120] 1734 U St
 LUDLOW, C. S. [12] 1016 14th St
 MCBAIN, H. L. [Dean, 6] 1016 14th St
 MACFARLAND, H. B. F. [Trustee, Corp., 4] Municipal Bldg
 MCKIMMIE, O. A. M. [M., 144] 1317 Rhode Island Ave
 MAGRUDER, E. P. [M., 145] The Ashley
 MANN, A. [G. S., 22] Department of Agriculture
 MANNING, W. R. [G. S., 22] 4700 Fessenden St
 MATTINGLY, W. F. [Trustee, Corp., 4] 1616 H St
 MECHLIN, O. A. [G. S., 22] 3020 Cambridge Pl
 MEDFORD, H. S. [M., 143] 138 C St, N E
 MERRILL, G. P. [G. S., 22] National Museum
 MERRILL, W. H. [M., 144] 1915 14th St
 MILLER, G. B. [M., 142] 1731 H St
 MONNETT, J. C. [L., 120] 1853 Ontario Pl
 MORSE, E. E. [M., 141] 1527 I St
 MORTIMER, C. W. [U. S., 30] 1530 I St
 MUNCASTER, A. [P., 183] 482 Pennsylvania Ave
 MUNROE, C. E. [Dean, 6] 2115 S St
 MYERS, G. E. [12] 1445 Mass. Ave
 NEEDHAM, C. W. [President, 6] 1710 N St
 NICHOLS, J. B. [M., 141] 1321 R. I. Ave
 NOYES, T. W. [Trustee, Corp., 4] 1730 New Hampshire Ave
 ODOR, C. L. [D., 171] 906 G St
 OSBORNE, J. B. [12] State Department
 OWEN, W. O. [M., 140] 2123 18th St
 PEAKE, J. F. [U. S., 30] P. O. Box 200
 PECK, P. N. [U. S., 30] 1718 22d St
 PEELE, S. J. [L., 120] The Concord
 PERKINS, H. C. [Trustee, Corp., 4] 1701 Connecticut Ave
 PETER, A. [L., 120] Washington Loan & Trust Bldg
 PHELPS, I. K. [M., 140] 1122 Vt. Ave
 PRENTISS, D. W. [M., 140] 1315 M St
 PRICE, T. M. [U. S., M., 30, 143] Department of Agriculture
 RANDOLPH, B. M. [M., 142] 1744 N St
 RAYMOND, G. L. [G. S., 22] 1810 N St
 REICHELDERFER, L. H. [M., 142] 1206 P St
 REMEY, C. M. [U. S., 30] 1527 New Hampshire Ave
 RICHARDSON, C. W. [Trustee, Corp., 4, 139] 1317 Connecticut Ave
 RICHARDSON, W. S. [Trustee, P., 5] 316 4½ St, S W
 RIGGLES, J. L. [M., 143] 1424 K St
 ROSA, E. B. [G. S., 22] Bureau of Standards

- RUEDIGER, W. C. [G. S., 22] 1821 Corcoran St
 RUFFIN, S. [M., 138] 1335 Conn. Ave
 SCHMIDT, A. F. W. [G. S., 22] 35 Bryant St
 SCHOENFELD, H. [G. S., 21] Cleveland Park
 SCOTT, J. B. [U. S., 29] Dept. of State
 SEIBERT, E. G. [M., 141] 916 14th St
 SHANDS, A. R. [M., 139] 901 16th St
 SHUTE, D. K. [M., 138] 1719 De Sales St
 SIMMS, G. G. C. [Trustee, P., 5] 1327 Corcoran St
 SMALL, W. S. [12] 1340 Irving St
 SMITH, C. S. [G. S., 22] 2122 H St
 SMITH, D. H. [12] 1905 F St
 SNIFFIN, W. W. [U. S., 30] 236 12th St, S E
 SNOW, A. H. [12] 2013 Mass. Ave
 SNYDER, A. A. [M., 141] 3051 N St
 SOWERS, W. F. M. [M., 142] 1707 Massachusetts Ave
 STANTON, T. W. [G. S., 22] 54 S St
 STAFFORD, R. G. [V., 189] 2719 14th St
 STAFFORD, W. P. [L., 120] 1603 Kenesaw Ave
 STARR, F. C. [U. S., 30] 1530 I St
 STAVELY, A. L. [M., 141] 1744 M St
 STERNBERG, G. M. [G. S., 22] 2005 Massachusetts Ave
 STERRETT, J. M. [G. S., 21] Springland, Pierce Mill Rd
 STOWELL, E. C. [U. S., 30] Cosmos Club
 SWETT, O. D. [U. S., 30; M., 143] Chevy Chase, Md
 SWISHER, C. C. [G. S., 21] Cosmos Club
 TAYLOR, J. W. [D., 171] 112 4th St, N E
 THOMPSON, H. C. [D., 171] 1213 Pennsylvania Ave
 THOMPSON, J. F. [M., 138] The Rochambeau
 THOMPSON, J. L. [M., 144] 805 12th St
 THURSTON, E. S. [L., 120] 1527 Corcoran St
 TURNER, J. P. [V., 189] 918 O St
 VANCE, W. R. [Dean, 120] 1742 Riggs Pl
 VAN ORSDEL, J. A. [L., 120] 2500 Ontario Rd
 VAN RENSSELAER, J. [M., 141] The Rochambeau
 VARNEY, E. W. [U. S., 30] U. S. Patent Office
 WAGGAMAN, S. [Trustee, P., 5] 1403 31st St
 WALCOTT, C. D. [Trustee, Corp., 4] 1743 22d St
 WALTON, J. R. [Dean, 171] 702 10th St
 WELLER, F. P. [Trustee, P., 5] 753 8th St, S E
 WELLINGTON, J. R. [M., 141] 1706 Rhode Island Ave
 WHITE, C. S. [M., 141] The Farragut
 WHITE, W. A. [M., 139] Government Hospital for Insane
 WILBUR, W. A. [Dean, 6] 1808 Belmont Rd
 WILEY, H. W. [G. S., 21] 1314 10th St
 WILKINSON, W. W. [M., 144] The Burlington
 WILLARD, A. C. [G. S., 22] 2204 Decatur Pl
 WILLIS H. P. [G. S., 22] The Mendota
 WOLFE, A. S. [D., 171] 1115 G St
 WOODWARD, B. T. [V., 189] 1236 B St, S W
 WOODWARD, S. W. [Trustee, Corp., 4] 2015 Wyoming Ave
 WOODWARD, W. C. [M., 139] 508 I St
 YARROW, H. C. [Trustee, Corp., 4; M., 138] 814 17th St
 YINGLING, C. K. [Supt. Hospital] University Hospital
 YOUNG, H. [V., 189] 67 R. I. Ave

INDEX.

Abbreviations, 203, 275.
 Academic Year, 3, 122.
 Administration and Instruction, 6.
 Admission to Bar of D. C., 136.
 Admission:
 Architecture, 72.
 College of the Political Sciences, 63.
 College of Arts and Sciences, 32.
 Department of Dentistry, 172.
 Department of Law, 122.
 Department of Medicine, 149.
 Teachers College, 68.
 Graduate Studies, 23.
 National College of Pharmacy, 188.
 Washington College of Engineering,
 53.
 Advanced Standing, 41, 54, 69, 128, 151,
 172.
 Alumni Associations, 271.
 Anatomy, 77, 153, 174, 175.
 Application for Admission, 32, 137.
 Applied Mathematics, 89.
 Appointment Bureau, Teachers, 71.
 Archæology, Classical, 85.
 Architecture, 77.
 Architecture, Division of, 72.
 Arts and Sciences, Department of, 21.
 Assistant Professors, 10.
 Assistants, 10.
 Associations, Boards, and Committees,
 271.
 Associates, 10.
 Associate Professors, 9.
 Astro-Physics, 79.
 Athletic Council, 274.
 Auxiliary Courses, 181.
 Bacteriology, 80, 156, 176.
 Bar of D. C., Admission to, 136.
 Biological Sciences, 80.
 Board and Rooms, 118, 137, 170.
 Boards and Committees, 271.
 Botany, 81, 184.
 Business High School Subjects, 41.
 Calendars, 2, 3.
 Chapel, College, 52.
 Chemistry, 81, 155, 174, 185, 186.
 Christian Association, 52.
 Civil Engineering, 90.
 Classical Archæology and the Fine Arts,
 85.
 Classical Club, 85.
 Classical Languages and Literatures, 83.
 Clinical Associates, 142.
 Clinical Facilities, 163.
 College of the Political Sciences, 62.
 College of Veterinary Medicine, 189.
 Colleges on Independent Foundations, 5.
 College of Arts and Sciences, 32.
 College of Engineering and Mechanic
 Arts, 53.
 Combined Courses, 46, 125.
 Commencement, Annual, 3, 14.
 Commerce and Transportation, 86.
 Committee on Employment for Students,
 169.
 Committee on the Library, 274.
 Committee on Publications, 273.

Committees, Associations, Boards, and,
 271.
 Contents, iii.
 Convocations, Fall and Winter, 14.
 Courses of Instruction, 76.
 Court of Appeals, 120.
 Crichton, James, Collection, 81.
 Crown and Bridge Work, 179.
 Davis Prize Speaking, 50, 59.
 Dean of Women, 51.
 Debating Councils, Intercollegiate, 274.
 Degrees: B.A., 42, 64, 69; B.S. in Chem-
 istry, 45; B.S. in C.E., 56, 57; B.S.
 in E.E., 56, 57; B.S. in M.E., 56,
 58; B.S. in Arch., 72; M. Dip., 64;
 M.E., 24; E.E., 24; C.E., 24; M.S.,
 23; M.A., 23; Jur. D., 26, 135; Ph.
 D., 24; M.D., 166; D.D.S., 180;
 Phar. D., 184; L.B., 135; LL.B.,
 135; M.P.L., 135; LL.M., 135.
 Degrees Conferred, 249, 258.
 Demonstrators, 10.
 Dental Anatomy, 174.
 Dental Building, Location, 181.
 Dental Course, 173.
 Dental Infirmary, 178.
 Dentistry, Department of, 171.
 Department of Arts and Sciences, 21.
 Department of Law, 120.
 Department of Medicine, 138.
 Departments of the University, 12.
 Dermatology, 159.
 Directory, 275.
 Dissertations, Regulations Regarding,
 27.
 Division of Architecture, 72.
 Doctorate Disputation, 27.
 Doctors of Philosophy, 266.
 Economics and Finance, 87.
 Education, 108.
 Education, Experimental Work, 70.
 Electrical Engineering, 92.
 Embryology, 154.
 Employment for Students, Committee
 on, 169.
 Engineering, College of, 53.
 Engineering Courses, 54.
 English, 97.
 Enosian Society, 51.
 Entrance Requirements, 33.
 Examinations for Admission, 32.
 Examinations for Degrees, 25, 133, 165.
 Executive Faculties, Undergraduate
 Studies, 30.
 Faculties and Teaching Staff, 7.
 Faculty of:
 Dentistry, 171.
 Graduate Studies, 21.
 Law, 120.
 Medicine, 128.
 National College of Pharmacy, 183.
 Undergraduate Studies, 29.
 College of Veterinary Medicine, 189.
 Fall Convocation, 14.
 Fees: A. and S., 117; D., 181; L., 136;
 M., 168; N. C. P., 187.

- French, 115.
 Geographical Distribution of Students, 247.
 Geology and Mineralogy, 98.
 Germanic Languages and Literatures, 99.
 Governmental Institutions, Privileges open to Students, 14.
 Graduate Studies, Faculty of, 21.
 Graphics, 94.
 Greek, 84.
 Gynecology, 161.
 Hatchet, Board of Directors of the University, 237.
 Heinzel Library, 13.
 Higher Degrees, 23.
 Histology, 154.
 History, 101.
 Honorable Dismission, 119.
 Hospital Appointments, 168.
 Hospitals, Location of, 163.
 Hospital Staff, 145.
 Hydraulic Engineering, 103.
 Hygiene, 162.
 Infirmary, Dental, 178.
 Instruction, Administration and, 6.
 Instructors, 10.
 Intercollegiate Debating Council, 274.
 International Law and Diplomacy, 103.
 Italian, 117.
 Laboratories, 147.
 Laryngology and Otology, 162.
 Latin, 84.
 Law Building, Location of, 122.
 Law: Courses, 125; Practice Courses, 131.
 Law, Department of, 120.
 Law Library, 135.
 Lecturers, 12.
 Legal Tactics, 132.
 Libraries, 13, 65.
 Library, Committee on the, 274.
 Library Staff, 12.
 Luther Rice Mission Studies, 52.
 Manual Training School Subjects, 41.
 Materia Medica and Therapeutics, 156, 175.
 Materia Medica, Botany, and Toxicology, 184.
 Mathematics, 105.
 Mechanical Engineering, 94.
 Medical Courses, 153.
 Medical Jurisprudence, 163.
 Medical Library, 148.
 Medicine, Department of, 138.
 Medicine, 157.
 Mental Diseases, 159.
 Mercantile Pharmacy and Pharmaceutical Jurisprudence, 186.
 Metallurgy, Prosthetic Dentistry and, 177.
 Microscopy, 186.
 Mineralogy, Geology and, 98.
 Mission Studies, Luther Rice, 52.
 Moot Court Work, 131.
 Morbid Anatomy, 157.
 Movement, George Washington, 4.
 Museums, 15, 148.
 National College of Pharmacy, 183.
 Obstetrics, 161.
 Officers of Administration and Instruction, 6.
 Operative Dentistry, 174.
 Operative Technics, 178.
 Ophthalmology, 162.
 Oral Surgery, 176.
 Organization, 12.
 Orthodontia, 173.
 Pathological Museum, 148.
 Pathology, 156, 174.
 Payment of Fees, 118.
 Pediatrics, 159.
 Pharmacy, 184.
 Pharmacy, National College of, 183.
 Philosophy, 106.
 Physics, 111.
 Physiology, 154.
 Political Sciences, College of the, 62.
 Political Science, 112.
 Porcelain Work, 179.
 Practice Teaching, 70.
 Preparatory Subjects for Admission, 33.
 President, 6.
 President's Council, 6.
 Preventive Medicine, 155.
 Prize Awards, 48, 49, 60.
 Prizes:
 Acker Prize, 167.
 Architectural League Prize, 74.
 Butler Prize, 168.
 Cutter Prize, 47.
 Colonial History Prize, 48.
 D. A. R. Prizes, 47.
 Davis Prizes, 47.
 Edward Thompson Co. Prize, 136.
 Ellsworth Prize, 136.
 Enosinian Society Prizes, 51.
 Examination Prize in Medicine, 167.
 Fitch Prize, 47.
 Funk and Wagnall's Prize, Standard Dictionary, 48.
 Gardiner G. Hubbard Memorial Prize, 48.
 Law Essay Prizes, 136.
 Medical Examination Prize, 167.
 Munroe Prize, 47.
 Muth Prize, 59.
 Old and Middle English Prize, 48.
 Paris Prize, 74.
 Pupin Prize, 75.
 Richardson Prize, 167.
 Ruggles Prizes, 47.
 Schmidt Prize, 59.
 Senior Law Essay Prizes, 136.
 Staughton and Elton Prizes, 46.
 Sterrett Memorial Medal, 47.
 University Prize in Dentistry, 181.
 Walsh Prize, 47.
 Warren Prize, 75.
 Washington Architectural Club Prize, 74.
 Yarrow Prize, 167.
 Professional Departments, 120.
 Professors, 7.
 Prosthetic Dentistry and Orthodontia, 173.
 Prosthetic Technics, 177.
 Psychology, 107.
 Recapitulation, 248.
 Registration by Deans, 23, 170.
 Romance Languages and Literatures, 115.
 Schedule of Courses, Required Subjects Arts and Sciences, 46.
 Schedule, Law, 124; Pharmacy, 187.

Scholarships:

- Admiral Powell Scholarships, 60.
- Architectural League Scholarships, 79.
- Carter Scholarships, 50, 60.
- Corcoran Scholarships, 167.
- Davis Scholarships, 50.
- Farnham Scholarship, 50.
- Kendall Scholarship, 49, 60.
- Medical Missionary Scholarships, 167.
- Ministerial Scholarships, 50.
- Stone Scholarship, 50.
- University Scholarships, 50, 60.
- School at Athens, 85.
- Secretary, 4, 6.
- Spanish, 116.
- Special Students, 42, 54, 123.
- Students in the University, 193.
 - Department of Dentistry, 242.
 - Department of Law, 225.
 - Department of Medicine, 238.
 - Graduate Studies, 193.
 - National College of Pharmacy, 243.
 - Undergraduate Colleges and Divisions, 203.
 - Veterinary Medicine, 245.

- Surgery, 159.
- Teachers Appointment Bureau, 71.
- Teachers College, 68.
- Teachers Course, 69.
- Teachers Diploma, 70.
- Text-books, Dental, 179.
- Therapeutics, Materia Medica and, 156.
- Theses, Regulations Regarding, 3.
- Toxicology, 184.
- Treasurer, 4, 6.
- Trustees, Boards and Committees of, 4.
- Trustees of the Colleges, 5.
- Undergraduate Studies, Faculty of, 29.
- University Council, 6.
- University Hatchet, Board of Directors of, 273.
- University Hospital, 163.
- University Library, 13.
- University Subjects, 76.
- Veterinary Medicine, College of, 189.
- Winter Convocation, 14.
- Withdrawals, 118, 137, 169, 182.
- Woman's Building, 51.
- Zoölogy, 80.





UNIVERSITY OF ILLINOIS-URBANA



3 0112 111803893